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# DIAN NOTES

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PUBLISHED QUARTERLY BY THE  
MUSEUM OF THE AMERICAN INDIAN,  
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# INDIAN NOTES

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MUSEUM OF THE AMERICAN INDIAN,  
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# INDIAN NOTES

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JANUARY, 1929

No. I

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## FURTHER NOTES ON INDIAN CEREMONIES IN GUATEMALA

S. K. LOTHROP

DURING the winter of 1927-28 the writer spent two months in the highlands of Guatemala, engaged principally in studying the material culture of the Quiche, Cakchiquel, and Zutugil. The following notes on religious observances are therefore superficial in nature, for the Guatemalan Indian to strangers is suspicious and uncommunicative, so that only by long residence can an observer hope to obtain detailed information.

The importance of Guatemala as a field of ethnographic study can scarcely be overstated. Probably nowhere in the New World can indigenous ceremonies be witnessed on such a large scale. For instance, the Quiche tribe alone outnumbers the entire Indian population

[1]

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of our Southwest, and presents for study an even more complex picture. And owing to the rapid extension of motor transportation local customs are rapidly disappearing. It therefore seems well to publish these incomplete data in the hope of stimulating further interest.

Many of the native ceremonies are dramatic dances with spoken texts. Usually there is a Spanish and an Indian version of each. It seems that often the Spanish text represents not a direct translation but the effort of some parish priest to eliminate pagan features. Two such texts were recorded during the past winter and the Museum has been promised a complete set.<sup>1</sup> The most common dramatic dances performed today are:

Baile de la Conquista	Baile de San Miguelito
Baile de la Danta	Baile del Toro
Baile del Mono	Baile del Tun
Baile de los Moros	Baile del Venado

### THE DANCE OF THE DEER

Next to the Dance of the Conquest, the Dance of the Deer is the commonest ceremony

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<sup>1</sup> I wish to acknowledge the kind assistance of Messrs. Fernando Cruz, Miguel Chuc, Ernest Lang, Abel de León, Carlos and Hector Luna, J. Antonio Villacorta, and many other friends. The expedition was generously financed by Mrs. Thea Heye, wife of the Director of the Museum.

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performed in the Quiche villages. Like the Dance of the Bull and the Dance of the Tapir, it symbolizes the control of man over the animals, a power created and enforced by the compelling magic of this very rite. In type if not in detail these three dances evidently antedate the Spanish conquest.

As in the Voladores ceremony<sup>2</sup> a pole 80 to 100 feet high must be secured for the Dance of the Deer. A tree is selected some time beforehand, and on a given day the men go out to it. There they pray and burn incense to the spirit of the tree, and finally they pass the night in slumber at its base. On the next day they fell and trim the tree. To the music of flute and drum they drag it to the plaza where they set it up directly in front of a belfry window of the church. Next they run a heavy hide cable from the tree to the ground in front of the church. This slopes at an angle of forty-five degrees or less. No one must walk beneath the cable, for such would entail bad luck; and especially are the women forbidden to pass, lest the cable break.

During the performance four men descend the cable, playing acrobatic tricks as they come down. They wear masks and costumes to

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<sup>2</sup> *Indian Notes*, vol. IV, no. 1, pp. 74-77.

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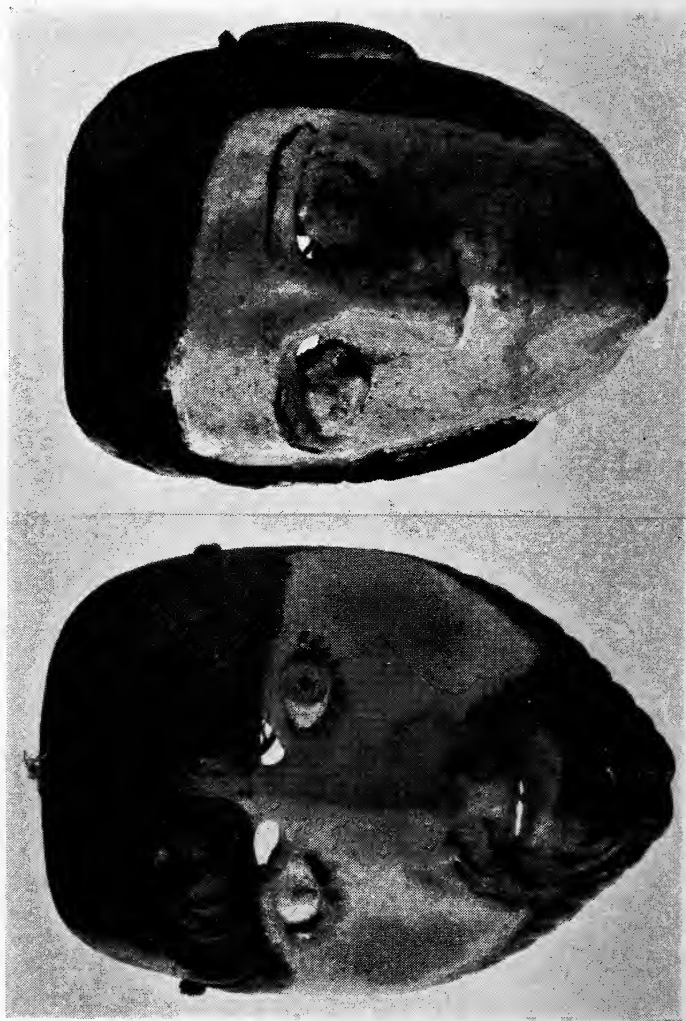


FIG. 1.—Masks representing Rij Achi and Rij Yxoc. Totonacapan. Height, 9 and 8 in. (16/801, 800)



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represent a jaguar, a puma, and two monkeys. On the ground are many men dressed and masked in the guise of deer and dogs. Over them presides an old man called *Rij Aman*, *Rij Achi*, or *José Botones*, and an old woman known as *Rij Yxoc* (fig. 1).

Accompanying the dance is a long spoken dialogue, the gist of which is that the deer should submit to being hunted by dogs and slain and eaten by man.

### A GUATEMALAN SNAKE DANCE

One of the dances performed by the Quiche Indians in the mountains of western Guatemala is marked by the ceremonial capture and manipulation of a snake. It has a few features in common with the snake dance still celebrated by the Hopi Indians in Arizona, and it also suggests an ancient Mexican rite.

The Quiche ceremony is known in Spanish as the *Baile del Gracejo*, or the Dance of the Jest. In the Quiche tongue they call it *Ajtze*, "laughter-causing;" *Patzkarin*, "those who are transfigured;" *Esalguach*, "may things be remedied." As these names imply, much burlesque figures in the performance, but there is a serious underlying purpose, namely, to perform an act of thanksgiving or penance dedicated ostensibly

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to some saint. The towns where they perform the Baile del Gracejo include Momostenango, Santa María de Chiquimula, Santa Cruz Quiche, Totonicapan, San Francisco el Alto, San Cristóbal, San Andrés Xecul, Cantel, Nahuala, Santo Tomás Chichicastenango, and San Antonio Alotenango. Thus it is evident that the rite is by no means uncommon.

In order to celebrate the Baile del Gracejo a number of men assemble and go into the country, usually selecting a wooded region. Near them, but apart, is an *ajits*, or witch-doctor, who carries candles and copal incense. After an hour or two, that is, when the *ajits* has found a snake, he calls to the others to burn copal. Thereupon the snake crawls up to them by itself, is captured, placed in a jar, and carried to the town. After the ceremony it is carried back to the woods and released.

The kind of serpent employed is said to be a matter of indifference. It is both affirmed and denied that it may be poisonous. In the latter case it would be a coral snake, the only poisonous variety found in the high mountains. One informant said that the snake's tongue is cut off before the dance begins. This suggests that formerly they employed a venomous snake and extracted the fangs.

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FIG. 2.—Baile del Gracejo mask of the Quiche of Totonicapan. Height,  $8\frac{1}{4}$  in. (16/833)

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For the dance the performers don wooden masks (fig. 2), which are unpainted or dully painted. Usually these are plumed with *pita* fiber. One man is dressed as a woman and another represents a European. Their identity thus concealed, they dance in two confronting lines in the plaza. At times the snake is placed on the ground and annoyed with rattles. At times they pick up the snake and thrust it inside their clothes so that it suddenly crawls out of a sleeve or a trousers leg, to the amusement of the spectators.

In all towns the Baile del Gracejo is of an erotic nature owing to the postures which are assumed. In Momostenango there takes place the simulated rape of a man dressed as a woman. In Chiquimula they shout aloud much spicy gossip, and describe in intimate detail the family life of various individuals, which the spectators receive with roars of laughter. One informant said that during the performance in Totonicapan the unmarried girls go to the man of their choice and ask him to marry them. Another denied it, stating that this custom was found in the Department of Huehuetenango and that it was associated not with the Dance of the Jest but with the Dance of the Deer.

Another general characteristic is the infliction

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of pain. Often they flog each other severely with thongs and ropes. In Chiquimula they roll up sleeves and trousers, and lash each other cruelly with *chichiste*, a plant with poisonous thorns.

Certain features of the performance recall rain dances of our Southwestern Indians. For instance, the Hopi make ceremonial journeys to collect snakes for their snake dance, keep them in a pottery vessel, and liberate the snakes afterward; while the burlesque and the beatings parallel features of the Zuñi rain dance. However, in spite of the almost universal acceptance among Indians of the snake as a water symbol, the Quiche dance has no apparent connection with the bringing of rain.

On the other hand, the sexual aspect of the Quiche rite suggests that it may be a fertility ceremony. This the Indians deny, saying that the whole performance is a mere *capricho*. It will be recalled that in Mexico the ceremony called *Atamalqualiztli* included the handling of live serpents, and this rite had to do with the food supply as well as with the rain-god Tlaloc.<sup>3</sup>

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<sup>3</sup> J. Walter Fewkes, A Central American Ceremony which Suggests the Snake Dance of the Tusayan Villagers, *Amer. Anthr.*, O.S., vol. VI, Washington, 1893.

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### ALTARS AT UTATLAN

Utatlan or Gumarcaah, the ancient capital of the Quiche nation, stands on a plain near the modern town of Santa Cruz Quiche. The central portion of the city occupies a flat table-

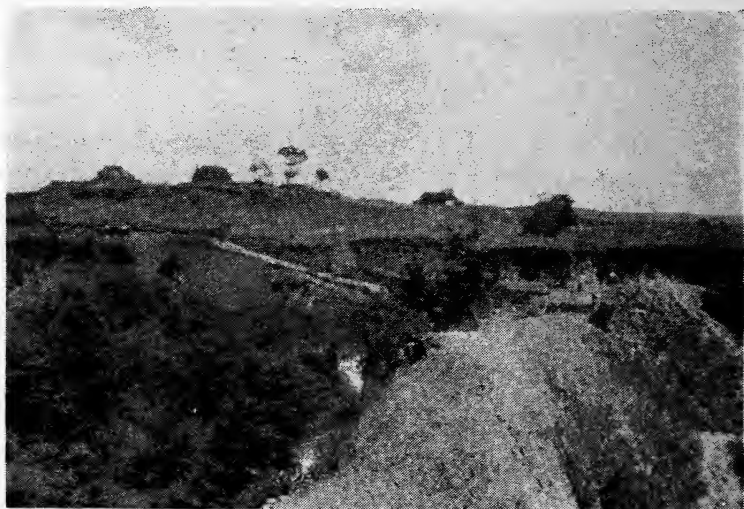


FIG. 3.—Causeway leading to the citadel at Utatlan.

land isolated from the neighboring country by a deep ravine. Access to this natural fortress is over a narrow causeway (fig. 3), said to be partly artificial. In ancient times a path terminating in thirty stone steps led up the side of the ravine, but of this no trace remains. Today the buildings at Utatlan, as shown in fig. 4, are badly ruined, in large part owing to the activities

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FIG. 4.—Ruins of Utatlan.

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of treasure-seekers. Their efforts have resulted in stripping the facing from most of the pyramids, and in many instances they have sunk short tunnels into the substructures to determine whether there are hidden vaults within.



FIG. 5.—Modern altar and prayer bundles on an ancient pyramid at Ūtatlan.

Peering into the obscurity of one of these tunnels not long ago I noticed that the side and roof were blackened by smoke. On the floor were ashes and traces of copal incense. Evidently the Indians had been coming to the home of their ancestors in order to pray to their ancient gods in their very temples.



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Once the discovery had been made, further search soon resulted in finding other evidence of recent worship. Usually the activities of the celebrants were concealed within the rubble cores of the pyramids. In one case, however, we found a place of worship in the open. This

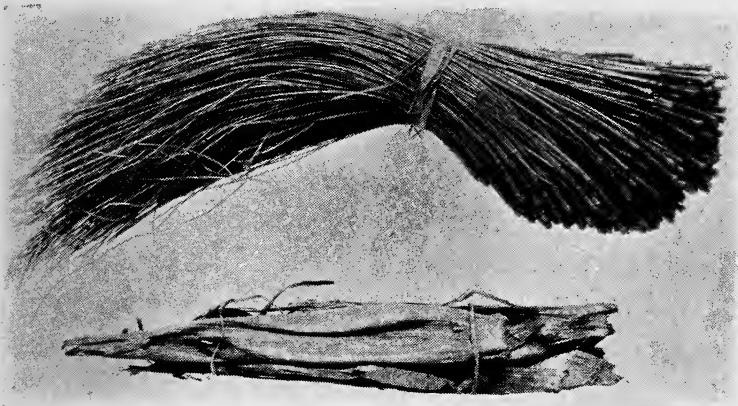


FIG. 6.—Pine-needle and corn-husk prayer bundles from modern altars at Utatlan. Length of husks,  $11\frac{3}{4}$  in. (16/792, 789)

is illustrated in fig. 5. The spot selected for their altar is the terrace of a pyramid. The vertical walls had been stripped of their facing, and the rubbish had accumulated on the cement floor below. Recently this rubbish had been cleared for a short distance, and copal had been burned on the floor-space thus exposed.

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A constant feature of all these informal altars is the presence of prayer bundles. A pile of them can be seen in the right foreground in fig. 5. Usually these took the form of corn-leaves, doubled over and tied. Sometimes, however, they were bundles of long pine-needles carefully laid together. Examples of both of these are illustrated in fig. 6.

### UAJXAQIP VATS, THE FESTIVAL OF EIGHT THREAD

This ceremony of confession and purification is repeated in Momostenango every 260 days. In other words, its date is fixed not by the solar year but by the ancient *tzolkin* or ceremonial year of 260 days. The name is that of the day on which it begins, *Uajxaqip Vats* or 8 Thread.

The word *vats* or *batz* in the Quiche tongue means "woven." Brasseur de Bourbourg<sup>4</sup> cites the compound *batzon*, meaning to compose, to remedy—a significance readily associated with a confessional rite. In the *Popol Vuh* there appear two divinities called *Hun Batz* and *Hun Choven*, who were skilled in the arts.<sup>5</sup> The

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<sup>4</sup> Grammaire de la langue Quiché, Paris, 1862, p. 169.

<sup>5</sup> See Brinton, Names of the Gods in the Kiche Myths, *Proc. Amer. Philos. Soc.*, Philadelphia, 1881, p. 31. Hun Batz and Hun Choven were changed to monkeys by Hunahpu. The *saraguate*, or howling monkey, is called

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name *Choven* is stated by Ximenes to mean "uno que esta en orden," while Brasseur translates it "un qui s'embellit." Varea gives the meaning "blanquearse" for the verb *chove*. The Quiche today associate white with purity; for instance, the name of the chief shaman in Chichicastenango means "white blood," i.e. "pure blood."

A further connection between the words *batz* and *choven* is that the position of the day *Vats* in the Quiche calendar is the same as that of the day *Chuen* in the ancient Maya calendar of Yucatan. Thus the ritualistic association of the two names extends from the highland to the lowland Maya, and, on the evidence in the *Popol Vuh*, it reaches far into the past.

The *Uajxaqip Vats* ceremony, like the pilgrimage to the Black Christ of Esquipulas,<sup>6</sup> is celebrated by individuals. That is to say, although great crowds assemble, there is no group routine as is the case with the dramatic dances. For it, each Momosteco is expected to return to his birthplace, even from afar, under penalty of certain calamity or death. The day *Uajxaqip Vats* and the ensuing day *Belejep E* are devoted to prayer, confession, and drunken-

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*batz* by the Quiche to this day. Brasseur (*Popol Vuh*, p. cxxxv, note 5) suggests that Hun Batz and Hun Choven are parallel to the Aztec deities Ozomatli and Piltzinteuclli.

<sup>6</sup> *Indian Notes*, vol. IV, no. 1, pp. 77-81.

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FIG. 7.—Indians at Momostenango burning incense and praying during the festival of Eight Thread.

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ness. From 15,000 to 25,000 celebrants are present.

The confession today is partly Christian and partly pagan. All day long the church is crowded with Indians kneeling in prayer on the flower-carpeted floor amid the glimmering light of beeswax candles, while the parish priest is besieged by a never-interrupted flow of confessions. At the same time great numbers repair to a hill called Sajbal near the pre-Spanish settlement Chuitzac, situated a short distance to the southwest of the modern town. There they pray, confess aloud, and burn copal incense before innumerable altars (fig. 7).

These altars are composed of sod, earth, ash, and rock, bedded in which are numerous fragments of broken pottery vessels. When someone has something especially important to confess, he carries out a *tinaja* or *olla* and breaks it on an altar. However, there is no idea of general destruction and renovation, as occurred with the kindling of the sacred fire in ancient times. In type the Momosteco altars (fig. 8) do not resemble those of other Quiche villages,<sup>7</sup> for elsewhere more elaborate structures of stone surmounted by crosses are employed. How many altars there are, I do not know, but they ex-

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<sup>7</sup> S. K. Lothrop, A Quiche Altar, *Man*, 55, London, 1926.

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tended up and down and far and wide on the gentle slope of the hill Sajbal. When one altar became too crowded to admit the approach of additional celebrants, fire was quickly kindled



FIG. 8.—Altar covered with broken pottery,  
Momostenango.

on the next, and soon another column of spicy copal smoke arose to join the murky cloud overhanging the whole scene. All night long the light of fires twinkled amid the pines.

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Thus for two days and nights praying continued before the altars. During this time the people often became very intoxicated and reached a state of religious frenzy, so that it is not well for strangers to approach or inquire into their devotions too closely.

Apart from the confessions, there was much praying aloud in a characteristic mixture of the Spanish and Quiche tongues. These prayers they addressed principally to a god named "World." This divinity I suspect is none other than *Hurakan* of the ancients, who, in the Popol Vuh, is regularly designated "Heart of the World." The vehemence with which a shaman denied this identification increased my belief in its validity.

This is an ancient ceremony. Confession in pre-European days was a well-recognized religious practice among Indians from central Mexico to southern Nicaragua. Therefore, in spite of the partial use of the church during the *Uajxaqip Vats* ceremony, it seems probable that the performance is basically pagan, modified, to be sure, to meet modern ecclesiastical exigencies. In fact, it appears more purely native than any of the Quiche rites witnessed by the writer. Furthermore, it is the only religious performance still celebrated in accord-

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ance not with the Christian but with the ancient indigenous calendar. Finally, the very name *Momostenango*<sup>8</sup> itself indicates the antiquity of the ceremony, for it means, in the Aztec tongue, "The place of altars."

### MAXIMON

During Holy Week the Indians of western Guatemala produce a strange scarecrow image which they call *Maximon*, "the great lord (or grandfather) who is bound." This cult, shared by the Quiche, Cakchiquel, and Zutugil, varies greatly from village to village. In general, the Maximon is an object of jest. He is called Judas or Pedro de Alvarado, and is treated with marked disrespect. In Panajachel the figure is rudely torn to pieces at the end of the ceremonies. In Santiago Atitlan, however, the Maximon is seriously worshipped as an important divinity.

In Atitlan, the Maximon was placed on the terrace fronting the church to the south of the main door. As seen in fig. 9 it resembled a scarecrow except that its clothes were new: in fact, the pick of many offerings. On its head were three straw hats; in the mouth a cigar; its

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<sup>8</sup> According to the dictionary of Rémi Siméon, *momoztli* means "autel, chapelle, oratoire dressé aux entre-croisements de chemins." According to Molina, *mumuztli* means "altar de los ydolos, o humilladero."



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FIG. 9.—Maximon and attendants at Atitlan.

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shapeless body was clad in European clothes, concealing (it was whispered) a silver image nine inches high; on the feet were boots. To this



FIG. 10.—Priests of the Maximon at Atitlan.

incongruous image the Indians presented food and drink of many kinds, boots, hats, all sorts of clothes, cigars, and other offerings. Around it burned candles both by day and by night. By its side stood an attendant who did not fail constantly to incense the

image with a swinging *brasero*. A photograph of the head-priest (he with the child) is reproduced in fig. 10. This worship continued from Monday of Holy Week until Friday afternoon.

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The feeling of the people of Atitlan toward the Maximon is attested by the following incident. About fifteen years ago a bishop arrived in Atitlan during Holy Week and was duly horrified to discover his flock worshipping an image of Judas. He thereupon issued orders that the figure be burned. But before this could be done the people assembled in great numbers, armed with clubs and machetes, and shortly the bishop had to flee from the town with a mob of enraged Indians howling at his heels.



FIG. II.—Maximon of San Pedro Laguna.

Many other pagan performances took place in Atitlan during Holy Week, indicating that the



FIG. 12.—Portal decorated with fruit, vegetables, and animals. Atitlan.

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ceremonies as a whole were regarded as a fertility rite. In front of the church two posts joined by a cross-bar were erected. These they covered with pine and cedar boughs, and further adorned with all manner of fruit and vegetables (fig. 12). On the cross-bar were a stuffed raccoon and two live *pisotes*. The altar of the church was similarly adorned, and no further attention was paid to it, for all the rites took place in the center of the church with participants and onlookers grouped in a circle. During long intervals the unmarried girls formed a compact group, at times acting as a choir. A most curious incident of Holy Week was the imprisonment of St. John and the Virgin. On the night of the crucifixion, they say, this pair enjoyed an interlude of passion; to prevent the annual repetition of this scandalous divertissement strong measures are necessary. Hence, the image of each was locked up in separate cells with the usual crowd of inebriates. On the following morning each one was liberated only after a *cofradia* had paid a fine of 200 pesos (\$3.33) in their behalf.

These and many other curious rituals took place in Atitlan during Holy Week, and over all the dominating spirit seemed not that of Christ but rather that of the Maximon.

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### ARIKARA ACCOUNT OF THE ORIGIN OF TOBACCO AND CATCHING OF EAGLES

MELVIN R. GILMORE

It is said that in ancient time a certain man of the Arikara was earnestly desirous of obtaining favor and the blessing of a gift of power from some supernatural being. He had diligently continued for many days to watch and pray, fasting and holding vigil day and night in lonely remote places. This he had done repeatedly during the course of several years; but still he had not received a blessing. At last, while he was thus engaged in meditation, fasting and praying in a high and remote place among the rocky hills, a bird appeared to him in a vision. The bird spoke to him, saying, "All our tribes"—meaning the different species of birds—"have been pleased by your persistence and strong will in fasting. Therefore I have been delegated and sent here to show you our favor and to give you a blessing."

This bird was the Eagle. When the Eagle appeared and came and sat down by the man, it carried in its beak a branch of some plant which

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the man had never seen before. It was a branch of a tobacco plant of the kind which the Arikara people have cultivated ever since that time and cultivate to this day.

The Eagle said to the man:

"This plant, this tobacco, is for you to burn in a pipe to make smoke-offerings to the Higher Powers. The flower buds of the plant are the part to be used for your smoking material. You see here upon this branch some of the seed vessels containing seeds. You shall take of these and plant them so you shall have increase and your people shall always in all time to come have tobacco to make smoke-offerings. This tobacco is one of the things which will be required to provide for the festivals which shall be celebrated in honor of Mother Corn. These agricultural ceremonies to be held in honor of Mother Corn will be performed at three times in the year. The first of these ceremonies shall be held when the warmth and light of the sun are returning in the springtime, when the hard frost is gone and the grass begins to show green upon the prairie. Then it is time to prepare your fields and to make ready to plant your crops. Then you will perform ceremonies and make prayers for the blessing of your fields, for warm, gentle rains, and that late frosts shall not

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fall upon and destroy your young growing corn and beans and other crops.

"The second occasion of ceremonies for Mother Corn will be the middle time of heat in the summer season. Then you will perform ceremonies and make prayers for good weather to prosper your fields, that grasshoppers shall not come upon your growing crops and consume them, that the good rain shall continue as needed, that destructive gales of wind and pelting storms of hail shall be averted, and so your crops shall come to maturity and you shall have food for your children.

"The third occasion of the ceremonies for Mother Corn will be at the end of the summer, in the harvest moon, at the time of in-gathering of your crops. At that time you will have a celebration of ceremonies in honor of Mother Corn, when you will dance, and sing songs of praise and thanks to God who has given you good crops of corn, beans, squash, and sunflowers, through the mediation of Mother Corn. At this time the people will bring into the temple gifts of food products, corn, squash, sunflower-seed, roots and tubers, and wild fruits, as thank-offerings and sacrifice to God for His providence. After the close of the ceremonies these thank-offerings of the people in the form of gifts of



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foodstuff are to be distributed to the poor and needy of the tribe, to widows and orphans and to the aged ones and to the sick.

"This tobacco is also to be used in smoke-offerings in the ceremony of Piraškani."

"And upon all occasions," said the Eagle, "I shall be one of the principal things offered in sacrifice. Whenever you make a serious undertaking you should wear one of these feathers." And he indicated the twelve tail-feathers of the eagle. "Wear one of these fastened to the hair of your head whenever you undertake any important affair, and we will be regardful and will recognize this token and will favor you in your undertaking and give you success."

Then the Eagle instructed the man in the method to be used to capture eagles to obtain the plumes. He said to the man:

"When you undertake the enterprise of catching eagles to obtain the plumes, you should go to some high, remote, and craggy place frequented by eagles. There on the summit you will dig a pit in which you can conceal yourself, sitting with your head just even with the surface of the ground. When you dig the pit you will carry away and hide from sight the earth which you remove in digging. You will make a framework that will fit over the opening of the pit,

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on which you will arrange the surface to look just like the surrounding undisturbed ground, putting back sods and vegetation to appear as it was before. And you will fasten some bait there, such as the carcass of a rabbit tied to the frame with sinew. And when you go to your eagle-pit you shall first undergo the cleansing and purifying vapor bath. And you shall go fasting to your eagle-pit and take your place there just before dawn, and so shall you wait and watch there all day in the pit, without food or drink. And you shall have with you in the pit a bundle of artemisia (*Artemisia gnaphaloides*).

"When you have thus settled yourself to watch, you must be quiet but alert. After a while the magpies will discover the bait which you have tied securely with sinew to the frame above your head, and will come and try to take it away. You will remain quiet, not frightening them away. Finally an eagle will observe the magpies and will soar above to investigate. After a while you will notice that the magpies have suddenly flown away. You will know that now the eagle is circling down to the bait. You must now be alert and ready. When he alights you will quickly reach through the framework and seize the eagle by his feet and pull him down into the pit. As you do so you will grasp with

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your other hand some of the artemisia and thrust it toward the eagle. He will seize the artemisia in his beak and thus you may avoid his snapping and tearing your flesh, and you will grasp and wrench his neck to kill him, being careful to hold firmly the eagle's feet so that he cannot get his talons into your flesh, else he might dangerously lacerate muscles and tendons so that you would be crippled, or he might even tear open an artery so that you would bleed to death."

When a man goes upon an expedition for catching eagles he establishes his camp at some suitable place where he finds wood and water at a considerable distance from his eagle-pit. In the evening, after a day spent fasting and watching in his eagle-pit, he takes the eagles he has caught and carries them down to his camp. There he secures the plumes. Then he eats, drinks, smokes, and rests. Next morning, before daylight, he again takes the purifying vapor bath, puts on clothing not used the day before, and again goes fasting to his eagle-pit as on the previous day. And so he continues to do every day for a period of about fifteen days, at the end of which time he comes home and brings the eagle-plumes he has taken. Then, when the autumn ceremony is made to Mother Corn in thanksgiving for the year's crop, he takes the

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eagle-plumes he has secured and carries them into the holy lodge, the temple, and there lays them as his sacrifice and thank-offering to Mother Corn before the altar. At the conclusion of the ceremonies the eagle-plumes are distributed, along with all the other various gifts which the people have brought in offering and sacrifice.

Thus is told the account of the origin of the Arikara tobacco and the ceremonial uses of tobacco and of eagle-plumes, and the method of catching eagles to obtain the plumes.

Tobacco is used on all occasions of solemnity or of seriousness and dignity which concern individual and personal life or of public affairs of a community or of the tribe. In all such affairs of the individual from infancy to death and burial smoke-offerings of tobacco were made. When an infant was named, an essential part of the ceremony was the making of tobacco smoke-offerings to all the Powers of the Four Quarters, to Mother Earth, and to the Chief Above in the heavens. When a man entered on any undertaking the Powers were invoked to his aid by means of offerings of tobacco; when a plant of medicinal use was dug from the ground it was first reverently addressed and begged to have compassion on the suppliant and to give of its

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virtue for healing. Then offerings of tobacco were placed in the hole from which the root had been dug.

When a person was ill, tobacco was burned on coals as an incense offered to the spirits of all deceased relatives of the patient, and to all the elements of the universe in prayer that the disease might be removed and that the person might recover health.

### SOME SPECIMENS FROM THE BERING SEA CULTURE

THERKEL MATHIASSEN

IN HIS paper on Ethnological Problems of Arctic America, in *Problems of Polar Research*, published by the American Geographical Society in 1928, Mr. D. Jenness mentions some old Eskimo objects from Little Diomedé island, St. Lawrence island, and other localities around Bering sea: "They differ from the usual Eskimo specimens in the wealth and style of their ornamentation, which consists entirely of scrolls, circles, and wavy lines, skillfully etched on hard ivory. Some of the designs recall the wood-

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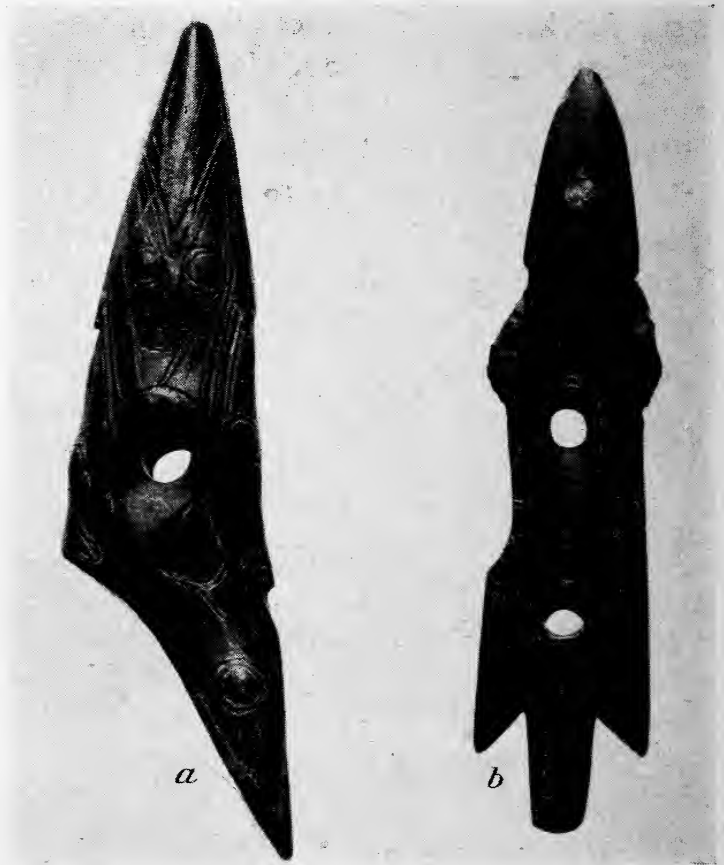


FIG. 13.—Ivory harpoon-heads from Banks island.  
Length, 9.3 and 8.4 cm. (2/4327; 6/3871).

carving of the Pacific Coast of Canada and southwest Alaska, others the well-known scroll-work of Melanesia." Jenness figures an ivory handle of a skin-scraper, a harpoon foreshaft,

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and a harpoon-head, and he assigns the term Bering Sea Culture to the old Eskimo culture represented by these specimens.

During my stay in New York in September last, happening to see some similar objects in the Museum of the American Indian, Heye Foundation, I was honored by its Director with an invitation to describe them in *Indian Notes*, of the acceptance of which the present brief article is the result. By permission of Mr. Thomas Thomsen, Curator of the Ethnographical Department of the National Museum at Copenhagen, I shall describe also a pair of similar objects preserved in this Museum.

Fig. 13, *a*, illustrates a harpoon-head of walrus ivory of a common and widely distributed type—thin, with closed shaft socket and blade slit at a right angle to the line-hole;<sup>1</sup> it is 9.3 cm. long. The only noteworthy feature of this specimen is the ornamentation, consisting of nucleated concentric circles, often raised above the surface, and between these a network of fine, etched, curved lines. The specimen was collected in Alaska by Lieut. G. T. Emmons, U. S. N., who

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<sup>1</sup> As to harpoon-heads I am using the same terminology as in my previous work, *Archæology of the Central Eskimos, Report of the Fifth Thule Expedition*, vol. IV, 1927, pt. II, p. II ff.

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was informed that it was found on Banks island.<sup>1a</sup>

Fig. 13, *b*, presents another harpoon-head from Banks island, also of walrus ivory, but of a quite different type. It has an open shaft socket, three spurs, two line-holes in the median line, and small side-blades of flint; it is 8.4 cm. long. The two line-holes seem to indicate that the line ended in a knot which rested in one of the holes, while the line passed through the other. The surface, especially on one side, is ornamented in a manner similar to that of the preceding specimen.

This curious type of harpoon-head, differing in the two line-holes from the ordinary Eskimo harpoon-head, was first figured by Dr. Clark Wissler<sup>2</sup> in the form of a richly decorated specimen from Cape Smythe near Point Barrow. Jenness, in his paper above cited, illustrates a

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<sup>1a</sup> There seems to be some question as to the provenience of the objects herein described as having come from Banks island. Lieutenant Emmons, who collected them in Alaska, was informed that they were from Banks island, but his informant may possibly have had in mind a smaller Alaskan island bearing the same name which is not locatable on the maps. In any event, the large and well-known Banks island of the Canadian Arctic does not seem to be the place of origin of these interesting specimens, so characteristic of the ancient culture of Bering sea and Bering strait.—EDITOR.

<sup>2</sup> Wissler, Harpoons and Darts of the Stefansson Collection, *Anthr. Papers Amer. Mus. Nat. Hist.*, XIV, pt. II, 1916, fig. 9.



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FIG. 14.—*a*, Fragment of ivory harpoon shaft from Kokuluk, St. Lawrence island (13/3497). *b*, Carved harpoon-head of ivory from Point Hope (3/2531). Length, 21 and 22 cm.

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specimen from Little Diomedé island, very similar in shape and ornamentation to that shown in fig. 13, *b*. In the National Museum at Copenhagen is an unfinished, greatly water-worn harpoon-head of the same type, but of course without ornamentation, from the coast around Bering strait; and in Prof. H. U. Sverdrup's collection from the Bering Strait region is a fifth harpoon-head of this type, without ornamentation.

Fig. 14, *b*, illustrates a whaling harpoon-head of the ordinary type, of very dark, nearly black, walrus ivory; it is 22 cm. long; the blade slit, at a right-angle to the line-hole as usual, is 7.5 cm. deep. The surface on both sides is richly decorated with the same concentric circles and network of fine, curved lines. This specimen is from Alaska.

The specimen shown in fig. 15, *a*, from Point Hope, Alaska, is a socket piece (mounting) for the fore-end of a harpoon shaft, of very dark walrus ivory. The rear end has two flanges for the shaft and the fore-end a socket for the fore-shaft; it has a large middle hole, and two smaller holes in the flanges. The surface is richly decorated on both sides. Around the holes are circles with small radiating lines, and the entire surface is covered with fine parallel and converging

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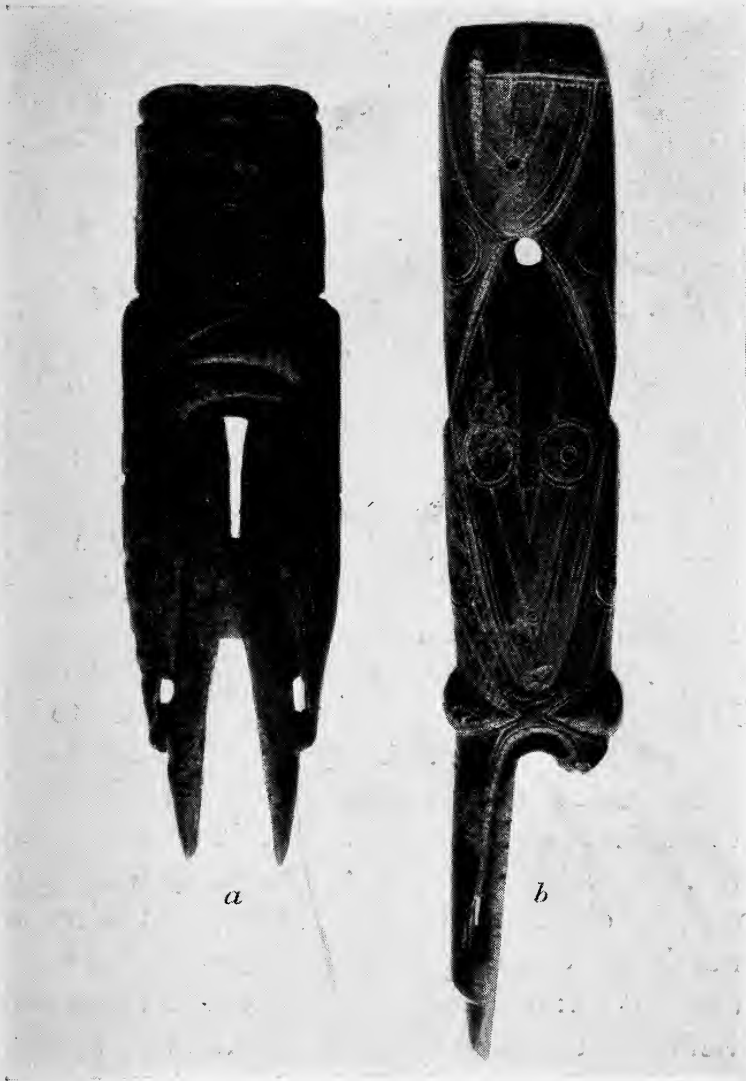


FIG. 15.—Ivory harpoon socket pieces. *a*, From Tigara, Point Hope, Alaska (14/4084). *b*, From Kotzebue sound, Alaska (9757). Length, 17.4 and 21 cm.

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lines, often with short transverse lines. It is 17.4 cm. long. Fig. 15, *b*, is another socket piece, 21 cm. long, similar in material, shape, and ornamentation; one of the flanges is broken. In this specimen the curved lines are more predominant. It is from Kotzebue sound and was collected by Lieutenant Emmons.

Fig. 14, *a*, represents a heavy point of very dark walrus ivory, 21 cm. long; its cross-section is a pointed oval. One end is broken, the other shows the effects of hacking. On both sides it is decorated with a number of nucleated circles with short radiating lines, connected with a system of double straight and curved lines. The use of the specimen is not clear. It is from Kokuluk on St. Lawrence island.

Fig. 16 shows two elaborately carved adz-handles of very old walrus ivory, both said to be from Banks island. They were collected by Lieutenant Emmons and are now in the Museum of the American Indian. Specimen *a* is 32.5 cm. long and is ornamented not only with concentric circles and curved lines, but with a number of carved animal heads protruding from the surface: walrus heads (only the tusks are visible in the photograph), and at the rear end a wolf head with open mouth. Specimen *b* is 28 cm. long and has the same kind of decoration

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FIG. 16.—Ivory adz-handles from Banks island. Length,  
32.5 and 28 cm. (2/4318, 4319)

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excepting the animal heads; it is however greatly decayed.

Fig. 17, *a*, shows a large hook of dark walrus ivory from Point Barrow, probably a blubber-hook. It is 17.4 cm. long. In the rear part is a flat surface for the shaft and three holes for lashings; the fore-end is sharp rhombic in cross-



FIG. 17.—Ivory hooks, probably blubber-hooks. *a*, From Point Barrow; Museum of the American Indian, Heye Foundation (15/5961). *b*, From Big Diomedé island; National Museum, Copenhagen (P274). Length, 17.4 and 12.8 cm.

section; it is decorated with an “eye” and some lines. In *b* of the same figure is shown a similar specimen, also of very dark walrus ivory, 12.8 cm. long, in the National Museum at Copenhagen. The rear end has a long slot for the lashing; the “eye” and the pointed fore-end give the object a certain resemblance to a raven’s

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head. It is from Big Diomedé island and was purchased from V. Jacobsen, a trader, who procured it from the Eskimo.

Fig. 18, *a-b*, illustrate a curious object of dark walrus ivory,  $7.0 \times 4.9 \times 3.1$  cm., viewed from two sides. It has two large, oval, transverse channels, and in one side a large socket, probably for a shaft. Both sides of the surface are richly decorated with fine etchings, slightly curved lines with very small transverse lines or dots, and, around the holes, circles. The object is symmetrical, but slightly defective. It is from Point Barrow. A complete specimen, seen in fig. 18, *c*, is of similar shape and ornamentation. The size is  $12.7 \times 5.8 \times 2.9$  cm.; the greater length is due to the two rings with serrated edges in the ends. The side shown in the photograph is arched, the other flat; both sides are entirely covered with fine, elaborately etched decoration. It has the same kind of socket in one side (the straighter of the two). This specimen, in the National Museum at Copenhagen, was obtained through V. Jacobsen and is from East cape, Siberia.<sup>2a</sup>

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<sup>2a</sup> Since this was written, Jenness' paper, *Archæological Investigations in Bering Strait (Ann. Rep. for 1926, Nat. Mus. Canada, Ottawa, 1928)* has appeared. In pl. XIIIb is figured a similar specimen from Little Diomedé island, and it is mentioned that a similar object is illustrated by

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FIG. 18.—*a, b*, Two sides of an ivory carving from Point Barrow, Alaska; Museum of the American Indian (15/5962). *c*, Similar complete ivory carving from East cape, Siberia; National Museum, Copenhagen (P350).



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Fig. 19, *a-b*, is a specimen carved of fossil mammoth ivory and in appearance is very old.



FIG. 19.—The two sides of a carving of fossil mammoth ivory from Point Hope. Length, 16 cm.; thickness, 3 cm. (3/2523)

Its shape suggests a butterfly, and it has in one side a socket similar to those of the preceding

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Dr. G. B. Gordon in the *Museum Journal of the University of Pennsylvania*, vol. VII, 1916, p. 61, a paper not accessible to me. [The specimen bears the caption "Ivory symbol of whale's tail, from the Alaska Eskimo," and is compared with certain so-called bannerstones.—EDITOR.]

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specimens. The ornamentation, similar on both sides, consists of curved lines and dots, but poorly executed in comparison with those of the other objects described. Probably the hard, coarse-grained, fossil mammoth ivory has not allowed the fine etching so characteristic of the walrus-ivory specimens. The socket, however, seems to indicate connection with the specimens shown in fig. 18. The length is 16 cm., the thickness 3 cm. It is from Point Hope.

For what purpose were these remarkable specimens used? Anything like them is quite unknown to modern Eskimo culture, yet no doubt they have had a certain purpose. They have been carved with great care and skill, and much labor has been bestowed upon them; but they seem not to be fitted for any practical purpose. The presence of a socket in each case seems to indicate that the object has been attached to something—a handle, or what? Are they ornaments; amulets, or a kind of ceremonial objects? Nothing definite can be said at the present time; yet in any event they are among the finest known products of Eskimo art.

So much for the description of these remarkable Eskimo specimens. All of them are made of ivory, are ancient in appearance, and are all mutually related by the style and richness of

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ornamentation. Still others of such objects (from Diomedé islands) are in the United States National Museum at Washington, brought back from his journey to Alaska in 1926 by Dr. A. Hrdlička and mentioned by him at the recent Twenty-third Session of the International Congress of Americanists in New York.<sup>3</sup> These specimens will be published later.

Thus we have from the shores of Bering sea and Bering strait a number of old Eskimo objects with the same rich style of decoration, otherwise unknown to Eskimo culture. It is therefore justifiable to class these objects as belonging to a new phase of Eskimo culture—the Bering Sea culture, as Jenness has done. What character of culture is it? Is it really Eskimo? Of the few types of implements as yet known from this culture the harpoon-head with closed socket (fig. 13, *a*), the whaling harpoon-head (fig. 14, *b*), the foreshaft (Jenness, fig. 3, *b*), the socket pieces (fig. 15), the adz-handles (fig. 16), and the blubber-hooks (fig. 17), are all well recognized Eskimo types, known from the recent Western Eskimo and, excepting the last one, from the old Thule culture as well—certainly they are Eskimo objects. Peculiar to the Bering Sea

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<sup>3</sup> Explorations in Alaska and the Bering Sea Islands.

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culture, however, are the harpoon-heads with two line-holes (fig. 13, *b*; Jenness, fig. 3, *c*; Wissler, fig. 9), the remarkable "ceremonial objects" (figs. 18-19) and especially the rich ornamentation—the combination of nucleated concentric circles, often with short radiating lines, with the fine network of curved lines, frequently double or with short transverse lines or dots.

The nucleated concentric circles, however, are very common in Alaska south of Bering strait, as a glance at Nelson's memoir on the Bering Strait Eskimo and Hoffman's book on The Graphic Art of the Eskimo will reveal. In some cases (e.g., fig. 17) this design suggests eyes, in others (fig. 14, *a*) it suggests flowers. Thus it is not this design that is peculiar to the culture, but its combination with the network of fine, curved lines, forming this unique expression of Eskimo art.

What of the origin of this ornamentation? Jenness has pointed out its similarity to the art of the Indians of the Northwest coast and the Melanesians, and continues: "With the latter, at least, they surely have no connection; the true source of the art lies more probably in northeastern Asia." I shall here only suggest that there is some connection between this ornamentation and the rich decoration of the

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hats of the Aleut.<sup>4</sup> But in the main I do not think that the question of the origin of the Bering Sea culture is yet mature for solution. We know too little of the culture itself; only very few of its types are yet known; and we know very little of the archeology of these regions. Therefore it must be left to future archeological exploration of the Bering Strait region to bring this interesting old Eskimo culture from its recent obscurity to the full light.

There is, however, an interesting problem which I think it possible to discuss now. This is the relation of the Bering Sea culture to another old Eskimo culture in these regions—the Thule culture.<sup>5</sup> The Thule culture has no doubt developed on the shores north of Bering Strait, whence it spread to the east, over the entire Arctic Eskimo territory. Which is the older, the Bering Sea or the Thule culture? Jenness<sup>6</sup> has presented the hypothesis “that there were Eskimos living south of Bering Strait before the Thule culture established itself in Arctic Alaska whose culture attained a level as high as, or higher than any known today and whose influence reached as far to the north as Pt. Barrow.”

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<sup>4</sup> Ivanoff, *The Aleut Hat and its Ornamentation*, *Twenty-third Intern. Congr. Americanists*, New York, 1928.

<sup>5</sup> See Mathiassen, *loc. cit.*, 1927, II.

<sup>6</sup> *Loc. cit.*, p. 170.

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For the solution of this question we must refer to a very important collection recently recovered by excavation at Point Barrow, Alaska, now in the University Museum at Philadelphia, on which Dr. J. Alden Mason<sup>7</sup> has presented a preliminary report. We will refer to this as the Van Valin collection, in recognition of the excavator.

In northern Alaska and Siberia is found a peculiar group of harpoon-heads which I shall call the Birnirk type after the locality (near Pt. Barrow) where they were first known in large numbers.<sup>8</sup> They are very closely related to the Thule harpoon-heads, being thin and having open shaft-sockets; but while the Thule heads in the rear end always have one spur, the Birnirk heads have two or three oblique spurs, and besides they often have side-blades of flint. Some of them have a blade-slit parallel to the line-hole; others have a barb and no blade-slit, but in the opposite edge is a flint blade. Often the Birnirk heads have ornamental features, suggesting connection with the Bering Sea culture; and in one case the full ornamentation

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<sup>7</sup> Excavation of Thule Ruins at Point Barrow, *Twenty-third Intern. Congr. Americanists*, New York, 1928. Also briefly mentioned in *Museum Journal*, Philadelphia, Sept. 1928, p. 295.

<sup>8</sup> Wissler, loc. cit., p. 405.

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of this culture—the nucleated, concentric circles and the network of fine lines—is found on a harpoon-head of Birnirk type (fig. 20). The specimen is of walrus ivory with slate blade, 9.5 cm. long, and belongs to Sverdrup's collection from Bering strait.

We find Birnirk harpoon-heads from Point Barrow,<sup>9</sup> they prevail in Stefansson's finds from Birnirk,<sup>10</sup> and they are predominant in the Van Valin collection from Point Barrow,<sup>11</sup> which however also contains a head similar in type and decoration to that shown in fig. 13, *a*. We have also Birnirk types in East Siberia.<sup>12</sup> The Birnirk heads, however, are not found in Knud Rasmussen's collections from Point



FIG. 20.—Harpoon-head from Bering strait; length, 9.5 cm. Sverdrup coll.

<sup>9</sup> John Murdoch, *Ethnological Results of the Point Barrow Expedition*, 9th Ann. Rep. Bur. Ethnol., Washington, 1892, fig. 210. Therkel Mathiassen, *Notes on Knud Rasmussen's Archæological Collections from the Western Eskimos*, *Twenty-third Intern. Congr. Americanists*, New York, 1928, fig. 4.1-2.

<sup>10</sup> Wissler, loc. cit., figs. 3-4.

<sup>11</sup> Mason, loc. cit.

<sup>12</sup> W. Bogoras, *The Chukchee*, *Jesup North Pacific Expedition*, vol. 7, pt. 1, New York, 1904, fig. 33, *d*. Mathiassen, 1927, II, fig. 12.2.

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Hope and East cape; in the last find the Thule heads predominate,<sup>13</sup> and there are also some of them in the Point Hope collection.<sup>14</sup> Are the Birnirk or the Thule harpoon-heads the older?

At the recent session of the Congress of Americanists in New York I discussed this question,<sup>15</sup> without arriving at a definitive conclusion. The simple shape and the geographical distribution speak in favor of the Thule heads being the older, the side-blades (found only as remnants on Thule heads) and partly the patination speak in favor of the Birnirk heads.

In the Van Valin collection no real Thule harpoon-heads are found: nearly all its harpoon-heads are of Birnirk type; and besides, we have one with closed socket and Bering Sea ornamentation. Apart from harpoon-heads this collection contains only specimens typical of the Thule culture, with very few and unimportant exceptions all known from the remains of this old culture in the Central Eskimo regions. This Van Valin collection from Point Barrow is thus very closely related to the Thule culture; only the harpoon-heads are different, belonging to the Birnirk type.

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<sup>13</sup> Mathiassen, loc. cit., 1927, II, fig. 11.2-5.

<sup>14</sup> Mathiassen, 1928, fig. 5.1.

<sup>15</sup> Mathiassen, 1928.



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Of a little later period is Stefansson's collection from Birnirk which I have seen in the American Museum of Natural History. Here, too, are no real Thule harpoon-heads; the Birnirk heads are in the majority. That this collection is later than the Van Valin collection is proved by the presence of a few later Alaskan types; the Thule types are not here so dominant; but the collection contains a harpoon-head with Bering Sea decoration.<sup>16</sup>

In Stefansson's later collections from Cape Smythe and Point Barrow the Birnirk heads are very few; the Cape Smythe collection, however, contains a pronounced Bering Sea harpoon-head.<sup>17</sup> We are here far from the Thule culture, and the more recent Alaskan types characterize the collections. Another step, and we are at the cultural stage found by Murdoch when in the eighties he visited Point Barrow.

At Point Barrow the following stages are thus represented: Van Valin—Birnirk—Cape Smythe—Point Barrow (Stefansson's collection)—recent culture. This series shows a slow succession from older to newer stages, a development from a stage very close to the Thule culture to the recent Point Barrow culture. But the pure

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<sup>16</sup> Wissler, loc. cit., fig. 6.

<sup>17</sup> Ibid., fig. 9.

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Thule culture is not found in this series. Have we, however, ever had pure Thule culture in northern Alaska? The Thule harpoon-heads we have anyway, even a few from Point Barrow.<sup>18</sup> Still more are found at Point Hope,<sup>19</sup> Cape Prince of Wales,<sup>20</sup> and East cape, Siberia, their representatives predominating in Knud Rasmussen's collection,<sup>21</sup> and they are even found on the north coast of Siberia as far as the Kolyma.<sup>22</sup> Besides, we have Thule harpoon-heads to the east throughout the entire Eskimo territory to Greenland. This seems to indicate that at a certain period these harpoon-heads were in use from East Siberia to Greenland. But in northern Alaska this continuous chain was broken and the Birnirk heads took their place; the Van Valin collection is from a period very close to the time when this change occurred; later on we have the development indicated by the names Birnirk—Cape Smythe—Point Barrow, until we reach the recent culture stage. If the pure Thule culture has to be incorporated in this chain it must be as the *oldest* link. Thus the Thule harpoon-heads must be older than the Birnirk heads.

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<sup>18</sup> Murdoch, loc. cit., fig. 208. Mathiassen, 1928, fig. 3.1.

<sup>19</sup> Wissler, loc. cit., fig. 17. Mathiassen, 1928, fig. 5.1-2.

<sup>20</sup> National Museum, Copenhagen.

<sup>21</sup> Mathiassen, 1927, II, fig. 11.2-5.

<sup>22</sup> Ibid., fig. 12.1.

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What has caused this change from the Thule to the Birnirk harpoon-heads in northern Alaska? Evidently the influence of the Bering Sea culture. The harpoon-heads of this culture have three spurs in a plane at a right-angle to the line-hole; the Thule heads have one slanting spur, nearly in the plane of the line-hole; by crossing of these two types we get the Birnirk heads, which have preserved the main features of the Thule heads, but have the slanting spur trifurcated and bifurcated, and besides often have side-blades and ornamental features in common with the Bering Sea heads.

If it is true that the Birnirk heads are modified Thule heads, occasioned by influence from the more southerly Bering Sea culture, then this influence must be later than the spread of the Thule culture to the east, as we have no traces of it east of Point Barrow. In northern Alaska, at any rate, we are justified in regarding the Thule culture as the older of the two.

In this conclusion we meet the difficulty that in the Bering Sea (and Birnirk) harpoon-heads we find side-blades, whereas on the Thule heads these are found only as vestiges. As yet, however, we know very little of the pure Thule culture in the western Arctic; no systematically excavated objects have yet been secured; there-

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fore it is not impossible that among the oldest Thule heads will be found some with true side-blades and not vestiges only; in fact the most westerly examples of all, from the Kolyma, have side stone-blades.<sup>23</sup>

While in northern Alaska the Thule culture apparently is older than the Bering Sea culture, we know nothing of conditions south of Bering strait. Probably the Bering Sea culture here is very old; but this must be determined by future research. Whatever the age and rank of the Bering Sea culture and its significance to the great Eskimo problems, it in all events has furnished us with some of the finest and most remarkable examples of Eskimo art.

### BIBLIOGRAPHIC NOTES ON THE SHRINKING OF HUMAN HEADS IN SOUTH AMERICA

MARSHALL H. SAVILLE

NO OBJECTS in an ethnological museum are of greater popular interest than the shrunken human heads, called *tsantsa*, from the territory inhabited by tribes of the Jivaro stock in the Oriente region of Ecuador. They are trophies,

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<sup>23</sup> Mathiassen, 1927, II, fig. 12.1.

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the heads of enemies belonging to alien tribes who were killed in battle. The scalp and the skin of the face and neck are carefully removed in their entirety from the skull, a rather difficult process; then attached to a vine and placed for a while in boiling water, where slight contraction takes place and the skin becomes more pliable for the final process of shrinking in such manner that the natural features are preserved and distortion is prevented. It is then taken from the vessel and cooled by placing it on a stick fixed in the ground. Next the scalp is sewn together where it was cut in skinning, and three pebbles are heated and put in the head through the opening in the neck. The head is kept in motion so that the stones roll about. When they have become cool, the pebbles are again heated, and this process is repeated many times. Afterward the stones are replaced by heated sand, which brings about the real reduction of the trophy. This treatment with the heated sand is carried on for several days, and sometimes even for weeks before the head has been sufficiently reduced to meet the requirements of the victor. As the skin dries and shrinks through this process of heating, the entire head, especially the face, is molded with the fingers to preserve the contour and the features. When the

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shrinking process is completed the head has become only about a fourth of its natural size, and is hard and dry like tough tanned leather. In most examples the lips are then sewed together.

The preparation of the *tsantsa* is accompanied with certain rather elaborate ceremonies, before, during, and after the work.

When finished, it is believed to be endowed with magic power and to contain the spirit of the killed enemy, ready to injure the owner in revenge; but this power is rendered void by the various ceremonies of the festivals which have taken place, the *tsantsa* becoming a fetish with supernatural power which the victor may make use of as he sees fit. The shrunken heads are kept in a conspicuous place in the house, but after a while, often years later, they gradually lose their potency and are discarded.

The Jivaro also make trophies of the heads of sloths, the reason for which, in the native mythology, seems to point to a primitive belief in human evolution, for it is thought that in ancient times all animals were men, Jivaros, who later were transformed into animals such as those which still exist. They believe that the sloth is a survival from these early times, and is still a Jivaro of an alien tribe, hence an enemy.

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FIG. 21.—Human bodies shrunken by the Jivaro Indians of Ecuador. (11/1830; 12/6201)

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For a long time we had heard that the Jivaro sometimes accomplish the shrinking of the skin of the entire human body, but until a few years ago no specimens came to light. Only one scientific traveler, von Hassel, has recorded information on this custom. He says: "There exists a tribe in the environs of the Cusicuari, Rio Negro, and Orinoco, who reduce entire bodies in this manner. Those of the Putumayo and Yapurá prepare, by means of smoke, in natural size, the hands of their dead enemies." Hassel mentions this in connection with a brief description of shrunken heads among the Aguaruna, a branch of the Jivaro stock in Peru.

Some time ago the Museum acquired, through the generosity of Mrs. Thea Heye, two completely shrunken human bodies from the Jivaro region which had been obtained by Sr. D. Gustavo Struve, who lived for six years among the Jivaro of the Oriente of Ecuador. In the collections of the Museum there are fifteen shrunken human heads and five sloth heads.

It will be observed in the citations following that the custom of preserving human heads by shrinking was not confined to the habitat of the Jivaro Indians in the Oriente region of Ecuador. The custom seems to have extended in the area east of the Andes from Peru northward to the



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present confines of Colombia. It appears to have been practised on the Pacific coast of Colombia in the region of the Choco river, in the Cauca valley of the Andes in the district of Popayan, and on the Ecuadorian coast near the equator in the present province of Manabí. Although no shrunken heads have thus far been found in ancient graves on the coast of Peru, yet mummified heads occur at Nazca, indicating a somewhat similar custom, so far as some of the features connected with their preparation are concerned.

1527 (?)

ESTETE, Miguel de. Noticias del Perú. Quito, 1918.

Under the title *El Descubrimiento y la Conquista del Peru*, Carlos M. Larrea published for the first time this important relation of Estete in the *Boletín de la Sociedad Ecuatoriana de Estudios Historicos Americanos*, vol. I, no. 3, Quito, 1918. It seems highly probable that Estete went to Peru with Pizarro on his third voyage southward from Panama in 1527, on which voyage Pizarro first reached the Peruvian coast. Following is a translation of Estete's account of the custom of shrinking heads on the Ecuadorian coast, the very first notice we have of this curious custom, undoubtedly made while Estete was with Pizarro at the time mentioned.

"The heads of the dead they preserve with certain balsams in this manner: After removing the skull through the neck, the face, retaining its true form of nose, eyes, eyelashes, eyebrows, and hair, they cure and give it a certain confection by means of which they preserve the flesh or skin so that it does not rot,

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and the gristle of the nose is entire and the hair and eyebrows and eyelashes (remain) attached to the flesh. So many are the baths that they give it, so as to cure and preserve it, that they make the face of a man to be wasted and shrunk and become quite small, much more so even than that of a newborn child. After having reduced it to a small size, they guard it in some small chests that they have in the temple, and it lasts so many years without rotting that the Indians say it lasts for two or three ages. Certainly it is a thing to admire, and one never seen before. And so it seemed to us when we first saw it, holding it to be certain that they were faces of a race of dwarfs that had lived in the country, until we learned the truth of the matter."

1555

ZÁRATE, Agustin de. Historia del descubrimiento del Peru. Antwerp, 1555. Edition of the Biblioteca de Autores Españoles, Historiadores Primitivos de Indias, tomo 2, p. 465, Madrid, 1853.

Zárate went to Peru in 1543. For a translation of this notice see *Saville* (1907).

1809

SOBREVIELA, Manuel, *and* NARCISO Y BARCELO, ——. Voyages au Pérou faits dans les années 1791 à 1794. Paris.

Mention is made of the custom of head-shrinking by Indians of the Pampa del Sacramento near the Rio Huallaga, Peru.

1815

PRIETO, Antonio José. Descripción de la provincia de los Jívaros, su religión, costumbres y producciones.

[62]

## INDIAN NOTES

This brief but important report was published as an appendix to the *Relación* of P. Fr. Bartolomé de Alácano, written in 1739, first printed in *Varones Ilustres de la Orden Seráfica en el Ecuador*, 2d ed., tomo II, Quito, 1886. Rivet (1908) informs us that the report of Prieto was made in 1815. Prieto writes that in his time the Jivaro of Gualaquiza, Bonboisa, and Zamora, as well as those of the region of the Rio Paute in the vicinity of Macas, shrunk the heads of their enemies by means of hot stones.

1858

VILLAVICENCIO, Manuel. *Geografia de la Republica del Ecuador*. New York.

Villavicencio writes (p. 361) that the Jivaro shrunk the heads of their enemies by means of heated stones.

1862

MORENO MAIZ, ——. *Tête d'Indien Jívaro (Perou Oriental) conservée et momifiée par un procédé particulier, avec quelques renseignements sur les Jivaros*. *Bull. Soc. d'Anthr. de Paris*, tome III.

1863

BOLLAERT, William. On the idol human head of the Jivaro Indians of Ecuador. *Trans. Ethnol. Soc. London*, N.S., vol. II, pp. 112-115.

MERRITT, J. King. Remarks on the mummied heads taken from the Jivaro Indians of Ecuador. *Proc. Amer. Ethnol. Soc.*, New York, March, pp. 13-16.

## INDIAN NOTES

1866

VARIAS noticias curiosas sobre la provincia de Popayan. Colección de Muñoz, tomo LXXXIX. *Colección de Documentos Inéditos del Archivo de Indias*, Madrid, tomo v, pp. 487-493.

On pp. 489-490 mention is made of the preservation of human skins and heads by the Indians of the district of Popayan, Cauca valley, southern Colombia.

1871

POZZI, Louis. Excursion militaire chez les sauvages du Maragnon, mission de Gualaquiza. Détails ethnographiques sur la tribu des Givari. *Annales de la Propagation de la Foi*, Sept., pp. 353 et seq.

1872

PHILLIPI, Rudolfo A. Una cabeza humana adorada como Dios entre los Jivaros (Ecuador). *Anales de la Universidad de Santiago de Chile*, tomo 41, pp. 91-96, 2 figs.

Published also in *Globus*, Braunschweig, 1872, Bd. XXI, pp. 340-343, 2 figs., under the title Menschenköpfe als Trophäen bei Wilden Völkern.

1873

SAFFRAY, Dr. Voyage a la Nouvelle-Grenade. (1869). *Tour du Monde*, Paris, tome XXVI, 2<sup>e</sup> sem., pp. 103, 111.

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## INDIAN NOTES

Saffray visited the Choco region of Colombia and writes (p. 103): "Quand un chef mourait, on tenait son corps au-dessus d'un feu lent, sur une claie, jusqu'à dessiccation parfaite, puis on l'enveloppait de toile de coton ornée d'or, de perles, de bijoux, et on le gardait religieusement dans une chambre à part. Des gens du peuple, on ne conservait que la tête. Comagré me montra une de ces têtes momifiées. Elle avait été désossée, et séchée de telle façon que la peau, s'étant resserrée d'une manière uniforme, il restait une reproduction parfaite de l'original, réduite à peu près au sixième du volume primitif, sans rides et sans déformation des traits."

On p. III is illustrated a shrunken head, but its provenience is not given.

1874

LUBBOCK, Sir John. Notes on the Macas Indians. *Jour. Anthr. Inst. Gr. Brit.*, London, vol. III, pp. 29-32, folded colored pl.

In discussing Lubbock's paper, A. W. Franks (p. 32) made the statement that "a still more remarkable specimen is preserved in the National collection, to which it was presented by H.R.H. the Prince Consort in 1852. It is only about one inch in height, and fixed to a stick dressed up as a doll. It was discovered in an ancient grave at Pisco, Peru.

1878

GONZALES SUAREZ, Federico. Estudio historico sobre los Cañaris. Quito.

Refers (p. 32) to shrunken heads.

[65]

## INDIAN NOTES

1880

SIMSON, Alfred. Notes on the Jívaros and Canelos Indians. *Jour. Roy. Anthr. Inst. Gr. Brit.*, London, vol. IX, pp. 385-394.

1882

TOPINARD, Paul. Chancha de la Republique de l'Equateur. *Bull. Soc. d'Anthr. de Paris*, 3<sup>e</sup> série, tome V, pp. 10-12.

HAMY, E.-T. Sur la chancha de la collection Bouchat. *Ibid.*, pp. 345-347.

BARBOSA RODRIGUES, —. Tribu dos Mundurucus. Cabeza mumificada. *Revista da Exposicao Anthropologica Brasileira*, Rio de Janeiro.

COLINI, G. A. Osservazioni etnografiche sui Givari. *Real Accademia dei Lincei*, Rome, anno CCLXXX, 1882-83, pl.

GATTY, Charles T. Catalogue of the Meyer Museum. Part II. Prehistoric antiquities and ethnography. Liverpool Free Public Library, Museum, and Gallery of Art, Liverpool.

On pp. 31-32, item no. 257, is described a shrunken Jivaro head in the Museum in Liverpool.

1885

NETTO, Ladislau. Investigações sobre a archeologia Brasileira. *Archivos do Museu Na-*

## INDIAN NOTES

*cional do Rio de Janeiro*, vol. VI, trimestres 1-4.

On p. 323 is illustrated a head shrunken by the Jivaro, worn on the back of an individual.

### 1886

SIMSON, Alfred. Travels in the wilds of Ecuador and the explorations of the Putumayo river. London.

For shrunken heads see pp. 90-91.

See also *Prieto* (1815).

CHANTRE, E. Observations sur une tête momifiée d'Indien Jivaro. *Société d'Anthropologie de Lyon*, Séance du 3 Juillet, Lyon.

### 1888

HAMY, E.-T. Tête momifiée provenant de la tribu Jivaros (République de l'Equateur). *Bull. Soc. d'Anthr. de Paris*, 4<sup>e</sup> série, tome X, p. 148.

LORTHIOIR, ——. Sur une tête momifiée, chancha, de l'Amérique du Sud. *Bull. Soc. d'Anthr. de Bruxelles*, tome VI, pp. 406-413, pl.

### 1892

VIRCHOW, Rudolph. Eine präparirte Kopf- und Gesichtshaut eines Guambia. *Ztschr. f. Ethnol.*, Berlin, Bd. XXIV, pp. 78-80.

## INDIAN NOTES

1893

HEIN, Wilhelm. Die Kopftrophäen der Jivaros.  
*Mitt. Anthr. Gesell. in Wien*, Bd. XXIII.

1895

VACAS GALINDO, Enrique. Nankijukima. Religion, usos y costumbres de los salvajes del oriente de Ecuador. Ambato.

1898

HAMY, E.-T. Nouveaux renseignements sur les Indiens Jivaros. *Décades Américanæ. Mémoires d'Archéologie et d'Ethnographie Américaines*, Paris, 3 et 4 déc., pp. 43-58.

1900

LES TÊTES momifiées des Incas. *La Nature*, Paris, Oct. 20, no. 1430, p. 336.

1901

VIRCHOW, Rudolph. Ausgeweideter Kopf eines Jivaro. *Ztschr. f. Ethnol.*, Berlin, Bd. 33, p. 265.

1903

AMBROSETTI, Juan B. Cabeza humana preparada según el procedimiento de los Indios Jívaros, del Ecuador. *An. Mus. Nac. de Buenos Aires*, tomo IX, sér. 3, tomo II, pp. 519-523, pl.



## INDIAN NOTES

MONTANÉ, Luis. Chanchas y Jívaros. *Crónica Médico Quirúrgica*, Habana, tomo XXIX, núm. 22, pp. 1-10, 2 ill.

### 1905

VON HASSEL, Jorge M. Las tribus salvajes de la region Amazonica del Peru. *Bol. Soc. Geogr. de Lima*, año XV, tomo XVII, pp. 27-74.

We translate what von Hassel writes (pp. 56-57) under the caption "Interesting Data about some of the Tribes":

"The tribe of Aguarunas, among other curious things, have the ability to prepare human heads and to reduce them to a fifth of their size, more or less. The process is as follows: The severed head of the enemy is left for two or three days on a pole, and when in the midst of decomposition they make a vertical cut in the skull, dextrously taking out all the bones so that only the thick skin is left. Then with hot stones they carbonize the inside of the head and place it afterward in the smoke of a bonfire of the roots of certain palms. This smoke, which has the same quality as alum, contracts and reduces the head to the size they desire. As the mandibles lack bones, they deform the two lips by means of a thread or a little piece of chonta palm.

"There exists a tribe in the environs of the Cusicu-ari, Rio Negro, and Orinoco, who reduce whole bodies in this manner. Those of the Putumayo and Yapurá prepare, by the medium of smoke, the hands of their dead enemies in natural size; others save the teeth. To these pertain also the Cashibos."

### 1907

SAVILLE, Marshall H. Contributions to South American archeology. The antiquities of

## INDIAN NOTES

Manabi. A preliminary report. The George G. Heye expedition. New York.

In this my first report on the Antiquities of Manabi, I reprinted, in the notes in the appendix, the chapter from Zárate (1555) concerning the people of the district of Pasao near the equator. I now translate what Zárate said regarding the shrinking of human heads in this region:

"And to all the posts [of the temples] they have men and children, the bodies crucified, or the skins so very well tanned that they do not give out odors; and fastened [to the said posts] are many heads of Indians which with a certain decoction they shrink (*consumen*) so that they remain the size of a fist."

MARTÍNEZ ANSOLA, Juan. Del pais de los Jivaros. *Blanco y Negro*, Madrid, no. 839.

### 1908

RIVET, Paul. Les Indiens Jibaros. Étude géographique, historique et ethnographique. *L'Anthropologie*, Paris, tome XVIII, nos. 3-6; tome XIX, nos. 1-3.

Shrunken heads are treated on pp. 72-90, pl. 1, fig. 23.

### 1909

EBERHARDT, Charles C. Indians of Peru. *Smithsonian Miscel. Coll.*, Washington, vol. 52 (no. 1817), pp. 181-194.

Treats of the custom of shrinking human heads among the Aguaruna Indians of eastern Peru.

FESTA, E. Nel Darien e nell' Ecuador. Torino.

Shrunken heads are described on pp. 193-195.

## INDIAN NOTES

UHLE, Max. La esfera de influencias del pais de los Incas. *Revista Historica*, Lima, tome IV, trimestres I-II, p. 10.

Uhle in treating of the first Nazca period of civilization makes mention of human trophy heads painted on vases depicting the custom of sewing the lips together, which he states is "even now in use in the reduced heads produced by the Jivaros."

### 1914

WARDLE, H. Newell. Description of a tsantsa in the ethnological collection of the Academy, with notes on another specimen. *Proc. Acad. Nat. Sci. Phila.*, Feb., pp. 197-205, pl. vi-vii.

The author treats in detail the feature of sewing the lips together.

### 1917

HERMESSEN, J. L. A journey on the Rio Zamora, Ecuador. *Geogr. Rev.*, New York, vol. IV, no. 6, Dec., pp. 434-449.

Mentions (p. 448) Jivaro head-shrinking, quoting from Simson.

### 1918

TELLO, Julio C. El uso de las cabezas humanas artificialmente momificadas y su representacion en el antiguo arte Peruano. Lima. 60 pp., 11 pl., 37 figs.

Illustrates and describes mummified human heads from Nazca like those depicted on numerous polychrome vessels from that region.

## INDIAN NOTES

### 1919

- FARABEE, W. C. Mummified Jivaro heads. *Mus. Jour.*, Philadelphia, vol. x, no. 4, Dec., pp. 173-183, ill.
- KARSTEN, Rafael. Mitos de los Indios Jíbaros (Shuará) del oriente del Ecuador. *Bol. Soc. Ecuatoriana de Est. Hist. Amer.*, Quito, no. 6, 15 pp.

### 1920

- KARSTEN, Rafael. Blodshämnd, krig och segerfester bland Jibaroindianerna i östra Ecuador. Helsingfors.

### 1921

- ANTHONY, H. E. The Jibaro Indians of eastern Ecuador. *Natural History*, New York, vol. XXI, no. 2, Mar.-Apr., pp. 146-159.
- Shrunken heads and the ceremonies attending veneration are mentioned on pp. 149-150.
- MEAD, Charles W. Shrunken human heads and how they are made. *Ibid.*, pp. 160-161, pl.
- MÉLIDA, José Ramón. Adquisiciones del Museo Arqueológico Nacional en 1919. Notas descriptivas. Madrid. Pp. 1-4, pl.
- Two views of a shrunken human head are illustrated.
- SKINNER, Alanson B. A remarkable shrunken head from Ecuador. *Year Book of the Public Museum of Milwaukee*, vol. 1, pp. 71-73, figs. 39-40.

## INDIAN NOTES

ANTHONY, H. E. Over trail and through jungle in Ecuador. *Nat. Geogr. Mag.*, Washington, vol. XL, no. 4, Oct.

Shrunken heads are described and illustrated on pp. 329-332.

### 1922

KARSTEN, Rafael. The religion of the Jibaro Indians of eastern Ecuador. *Bol. Acad. Nac. de Hist.*, Quito, tomo IV, núm. 10-11, 44 pp.

### 1923

KARSTEN, Rafael. Blood revenge, war, and victory feasts among the Jibaro Indians of eastern Ecuador. *Bull. 79, Bur. Amer. Ethnol.*, Washington, 94 pp., 10 pl.

This is an English translation of the work published in Helsingfors in 1920. The Head Trophy (Tsantsa) and its Preparation, as well as a detailed description of the feasts and dances accompanying its preparation, are treated on pp. 28-29. In pl. 7 is shown a shrunken head worn on the breast of a victor.

UP DE GRAFF, F. W. Head hunters of the Amazon. Seven years of exploration and adventure. New York.

Chap. XXI, "The Jívaro heads," pp. 272-283.

DYOTT, G. M. Silent highways of the jungle. Being the adventures of an explorer in the Andes and reaches of the upper Amazon. New York.

Shrunken heads among the Aguaruna of Peru are treated, pp. 285-286. Specimen illustrated in plate opposite p. 284.

## INDIAN NOTES

### 1924

KARSTEN, Rafael. Fiestas de la victoria de los Indios Jivaros del Oriente y proceso de la reducción de la cabeza humana ó "tzantza." Quito.

GUIDE to the Museum [of the American Indian, Heye Foundation]. Third floor. *Indian Notes and Monographs*, misc. no. 38, New York.

### 1925

SKINNER, Alanson B. Grisly war trophies. (Jivaro.) *Sci. Amer.*, New York, Sept.

### 1926

DYOTT, G. M. On the trail of the unknown. New York.

Head trophies among the Jivaro of Ecuador, pp. 188-190, pl.

PREUSS, K. Th. Kopfjager und ihre Fetische. *Die Woche*, Berlin, Heft 9, Feb. 27, pp. 204-206, 11 ill.

### 1927

MONTALVO GUENARD, J. Leandro. Embalsamientos indígenas. La cabeza de "sanza." *Grafico*, San Juan, Porto Rico, July (?).

An article published in three issues of the magazine cited, with six figures illustrating chiefly the process employed in shrinking the heads.

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### THE DAKOTA CEREMONY OF HU<sup>n</sup>KÁ

MELVIN R. GILMORE

THE DAKOTA formerly had a custom by which marks of recognition and distinction were publicly conferred on persons who from personal character and acts of public benefaction were esteemed worthy of honor. This custom was the institution of Hu<sup>n</sup>ká. The term *hu<sup>n</sup>ká* primarily means parent or ancestor. In the primary sense of the term an elder brother might be termed *hu<sup>n</sup>ká* by his younger brothers and sisters by reason of his favors and benefactions to them. The sun might be called *hu<sup>n</sup>ká* from the beneficent effects of his radiance. So any person who had become elevated in the esteem of the people in such degree as to be considered in the manner of a public benefactor or parent to the community, might be given this title. Thus the term was used as a title of respect, and those on whom it was conferred constituted socially an aristocracy within a community which, in political organization, was essentially democratic, for the Dakota form of government was quite democratic. In the Dakota nation any social distinction was based on personal character and worth; and positions

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of military and political leadership depended on personal qualities of ability, force, and tact.

All persons who themselves had been at some time made *Hu<sup>n</sup>ká* formed a sort of society or class. Recognition of any person as *hu<sup>n</sup>ká* was made the occasion of public ceremony. Some family of good standing, and being of this rank, having a daughter come to marriageable age, might announce that they would hold the *Hu<sup>n</sup>ká* ceremony for her at a certain time. Such a ceremony then would be a kind of coming-out party for her.

A ceremonial tent was pitched within the camp-circle. Its cover was laid back, open at the front. Then an enclosure was erected as a screen before this open tent to exclude the public gaze from what went on within. The walls of this enclosure extended forward for a distance of some yards at each side of the entrance to the ceremonial tent.

A good old man of high esteem in the community would be asked to officiate in the ceremony, and would be seated in the place of honor in the tent. A fire was laid in the fireplace, a bunch of wildsage (*Artemisia gnaphaloides*) was laid at the altar-place. On the wildsage rested a buffalo-skull, at one side of which was an ear of corn, and before it a pipe. The pipe was filled



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with a preparation for smoking consisting of a mixture of tobacco and the dried inner bark of the red dogwood (*Cornus stolonifera*). A small wooden bowl containing a few bits of meat and a small horn-spoon was placed within convenient reach of the old man.

Reputable and honorable persons were invited to assist by their presence. They were seated at the sides within the tent. The chorus of singers and drummers was seated in front of the tent within the screened enclosure. Gifts were heaped within this enclosure, and horses which were to be given away were tied just outside in front. Crowds of people thronged about outside to see what they could, and also to be on hand to receive any gifts which might come their way if they were so fortunate in the distribution of gifts after the ceremony.

The girl for whom the ceremony was made would be brought to the ceremonial tent from her domicile, carried on the shoulders of a man. The man who went to fetch the girl stooped before her and she placed her arms about his neck. Another man assisted by lifting her feet from the ground and carrying them. So she was carried in and seated opposite the old man who officiated in the ceremony. He would then remove the girl's shawl from her shoulders and

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put upon her a fine new dress over the one which she was wearing. Then her hair was combed, a yellow down-feather was tied in her hair on the top of her head, and a new shawl was draped over her shoulders.

The yellow down-feather was an emblem and its color was symbolic. Yellow suggests the radiance of the sun, the source of light and warmth and energy in the world, and symbolized the aspiration for spiritual enlightenment and power, and the hope and joy and gladness of life.

After the girl's hair was combed and she was newly dressed, the old man gave her a lecture in which he exhorted her to the practice of the virtues of chastity, hospitality, industry, honesty, generosity, gentleness; kindness to the old, the sick, the poor, and the needy; compassion for distress, and tenderness toward children. During the exhortation she was ceremonially fed with the meat from the small wooden bowl, with the horn-spoon. The ceremony was concluded by the smoke-offerings made by the old man with the pipe before mentioned, which was before the buffalo-skull. After the close of the ceremony the gifts were distributed to the people. The names of those to whom the gifts were made would be called out by the herald and they would come forward and receive the gifts.

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The account I have here given is from information from a native Dakota, Mr. Charles Frazier, of Santee, Nebraska, who has himself witnessed the ceremony three times among his people on the Rosebud reservation, South Dakota.

### ASTRONOMICAL OBSERVATIONS IN ANCIENT MEXICO

MARSHALL H. SAVILLE

THE ACOLHUA branch of the Nahua stock of the central highlands of Mexico had its metropolis in Texcoço, founded long before Tenochtitlan, the Aztec capital. These cities were situated respectively on the eastern and the western shore of Lake Texcoco. One of the most enlightened kings of Texcoco was Netzahualpilli, who reigned from the year 1470 to 1516. In many respects the Texcocans had reached a far higher plane of civilization than the Aztecs, who, as is well known, built much of their culture on what they absorbed from some of their neighbors of the same linguistic stock. In this connection it is interesting to record here an item gleaned from the work of Torquemada<sup>1</sup>

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<sup>1</sup> Juan de Torquemada, *Monarchia Indiana*, Madrid, 1613. The accompanying quotation is from the second

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regarding the astronomical achievements of Netzahualpilli, which seems thus far to have been overlooked by students. It is information of far-reaching interest in mentioning methods used to ascertain with precision the movements of the heavenly bodies, especially in view of the recent illumining studies of the Mayan and Mexican calendar systems by Dr. Spinden, Mrs. Nuttall, and others, and of the undoubted existence of observatories in a number of Mayan cities in Middle America.

Writing of Netzahualpilli, Torquemada says:

"They say that he was a great astrologer, and prided himself much on his knowledge of the motions of the celestial bodies; and being attached to this study, that he caused inquiries to be made throughout the entire extent of his dominions, for all such persons as were at all conversant with it, whom he brought to his court, and imparted to them whatever he knew; and ascending by night on the terraced roof of his palace, he thence considered the stars, and disputed with them all on difficult questions connected with them. I at least can affirm that I have seen a place on the outside of the roof of the palace, inclosed within four walls only a

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and best edition, Madrid, 1723, tomo I, lib. 2, cap. lxiv, p. 188.

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yard in height, and just of sufficient breadth for a man to lie down in; in each angle of which was a hole or perforation, in which was placed a lance, upon which was hung a sphere; and on my inquiring the use of this square space, a grandson of his, who was showing me the palace, replied that it was for King Netzahualpilli, when he went by night attended by his astrologers to contemplate the heavens and the stars; whence I inferred that what is recorded of him is true; and I think that the reason of the walls being elevated one yard above the terrace, and a sphere of cotton or silk being hung from the poles, was for the sake of measuring more exactly the celestial motions, like the philosopher who, seated in the hollow of a cask, spent thirty-two years in watching with precision the course of a single star."

### RECENT ACCESSIONS BY GIFT

*From Mr. Reginald Pelham Bolton:*

Fifty-five arrowpoints. Oldrag, Madison county, Virginia.

Chipped celt; ten knife-blades and arrowpoints. Duley, Prince Georges county, Maryland.

*From Mr. Carlos and Miss Consuelo Clark:*

Man's dance costume. Yumbo Indians. Oriente province, Ecuador.

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*From Dr. D. S. Davidson:*

Lichen (*Umbilicaria proboscidea*), cooked with white-fish broth and used as a laxative. Montagnais. Quebec, Canada.

Pair of caribou-skin mittens decorated with beadwork and fur (collected by S. C. Eastwood). Khotana band of northern Athapascans. Kobuk river, Alaska.

*From Mr. J. D. R. Davis:*

Stone ax; three celts; ten arrow- and spear-heads. Found in Portage county, Ohio.

*From Mr. Peter S. Gettell:*

Grooved ax. Riverdale, New York City. (See page 94.)

*From Mr. Albert G. Heath:*

Seven knife-blades and arrowpoints. Ross county, Ohio.

Six arrowheads. Cornwell, Chester county, South Carolina.

Chipped knife-blade. Villa Ridge, Franklin county, Missouri.

Chipped knife-blade. Red Bay, Franklin county, Alabama.

Chipped celt. Overton county, Tennessee.

*From Mrs. Thea Heye:*

Basket; ten miniature baskets; large oval basket decorated with shell discs. Pomo. California.

Two heart-shape silver brooches; seven circular silver brooches; one pair of silver earrings. Seneca. Cattaraugus reservation, New York.

Suit of deerskin consisting of coat, vest, and trousers, decorated with quillwork; pipe-bag with beaded and quilled decoration. Saulteaux. Ontario, Canada.

Sash with beads woven in it; two woven sashes. Huron. Quebec, Canada.

Black cloth blanket with beaded decoration. Chipewewa. Quebec, Canada.

Wooden box painted red and black, containing carved animal heads of ivory, probably a hunting tally. Eskimo. Yukon river, Alaska.

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Two quilled birch-bark boxes and covers; fire-making outfit consisting of a horn tinder-box, a flint and steel. Micmac. Nova Scotia.

Necklace of silver and turquoise beads and silver pendants. Navaho. Arizona.

Small oval wooden box and cover with serrated decoration. Chippewa. Wisconsin.

*From Mr. Arthur Curtiss James:*

Two grinding stones; grooved ax; eleven stone celts; stone gouge; thirty-seven knife-blades, arrow- and spear-points, and drills; bola; copper blade.

*From Mr. Joseph Keppler:*

Mask representing a Chinaman, used in New Year's dance, with red and yellow painted decoration. Seneca. Cattaraugus reservation, New York.

*From Miss Augusta Mueller:*

Pair of moccasins; moccasin; pack bag; doll's coat; doll; doll's moccasins; belt; goose foot pouch; piece of white tanned sealskin; toy steatite lamp and kettle; comb; labret; steatite harpoon-point; bone and stone arrowpoint; toggle in form of a fish; toggle in form of a canoe; toggle in form of a war horse; two ivory carvings; ivory needle-case; three ivory labrets; broken ivory harpoon-head; harpoon ivory tip; saw with iron blade and antler handle; five fragmentary harpoon-points; five bone harpoon-heads; drill with ivory bow and wooden shaft; toy harpoon made of ivory; bone needle; four slate blades; five flint blades; bone and stone knife; two bone knife-handles; fragment of bone knife-handle; adz-head of bone; drill socket of bone; bone tube; whetstone; bone toggle. Eskimo. Point Barrow, Alaska.

*From Miss Grace Nicholson:*

Skin bag containing twenty-seven gambling sticks with red and black painted decoration. Haida. Queen Charlotte island, British Columbia.

*From Mr. J. A. T. O'brig:*

Six magnifying lenses.

*From Miss Meredith Page:*

Beaded bag front. Collected in 1865 by Alfred C. Ferris. Chippewa. Crow Wing, Minnesota.

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Apron of basketry decorated with oliva shell beads.  
Hupa. California.

*From Mrs. Edwin P. Piper:*

Dance club with stone head; leather bag containing steel and tinder for fire-making; two iron tomahawk-blades. Oglala Sioux.

*From Mrs. James M. Stuart:*

Horsehair bridle; doll. Apache. San Carlos, Arizona.

*From Mr. Otto Willi Ulrich:*

Hammock with red, yellow, and black decoration; rolls of tobacco. Tucano. Rio Negro, Brazil.

Eleven arrows of various kinds. Parintintin. Rio Tapajoz, Brazil.

Necklace of teeth and claws; necklace of feathers; feather head-ornament. Lengua Guarani Indians, Gran Chaco, Paraguay.

Lasso of the Gauchos (Paraguay).

Several photographs.

*From Mrs. Cornelius Zabriskie:*

Corrugated cup. New Mexico.

## RECENT LIBRARY ACCESSIONS

ALEXANDER, Hartley B. The Cooke-Daniels lectures. Denver, Denver Art Museum, 1927. I, The ritual dances of the Pueblo Indians; II, The pictorial and pictographic art of the Indians of North America; III, Monumental architecture. (*Gift of the author*)

— L'art et la philosophie des Indiens de l'Amérique du Nord. Paris, 1928. (*Gift of the author*)

ARENDT, Marion Lucile. The historical significance of Mexican art and architecture. México, Sec. Ed. Púb., 1928.

BALLARD, Arthur C. Some tales of the Puget Sound Salish. Seattle, University of Washington, 1927.

BAUDIN, Louis. L'empire socialiste des Inka. Paris, Institut d'Ethnologie, 1928.



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- BUSHNELL, David I. Friedrich Kurz, artist-explorer.  
Washington, Smithsonian Inst., 1928.
- CANADA. DEPARTMENT OF MINES. *National Museum*.  
Bulletin 50. Annual Report for 1926. Ottawa, 1928.
- . GEOGRAPHIC BOARD. Place-names of Alberta.  
Published for the Geographic Board by the Department  
of the Interior. Ottawa, 1928.
- CHI-CHAO, Liang. Archeology in China. Washington,  
Smithsonian Inst., 1928.
- CHURCH, Thomas. The history of Philip's war. . . .  
With numerous notes . . . also, an appendix . . . by  
Samuel G. Drake. Exeter, N. H., 1840. (*Gift of*  
*Mr. Joseph Keppler*)
- CONNELLEY, William Elsey. Indian myths. Chicago, c  
1928. (*Gift of Rand, McNally & Co.*)
- [CORNPLANTER, Jesse.] Iroquois Indian games and dances  
drawn by . . . n.p., n.d. (*Gift of Dr. Frederick Starr*)
- DAWSON, William Leon. The birds of California. Format  
de luxe. Sunset edition, 4 vols. San Diego, Los  
Angeles, San Francisco, 1923.
- DE HUFF, Elizabeth Willis. Swift-Eagle of the Rio  
Grande. Chicago, c 1928. (*Gift of Rand, McNally*  
*& Co.*)
- DOUGLAS, R. Place-names of Prince Edward island.  
Ottawa, 1925.
- FIELD MUSEUM OF NATURAL HISTORY. Annual report of  
the Director for the year 1927. Chicago, 1928.
- . Field Museum and the child. Chicago, 1928.
- FORD, Worthington C. Washington's map of the Ohio.  
Excerpt from Proceedings Mass. Hist. Soc., Boston,  
1927, pp. 71-79.
- [GOVE, Capt. Jesse A.] The Utah expedition, 1857-1858.  
Letters of Capt. Jesse A. Gove. Coll. N. H. Hist.  
Soc., vol. 12, edited by Otis G. Hammond. Concord,  
1928.
- GRINNELL, George Bird. The great mysteries of the  
Cheyenne. Lancaster, Pa., 1910. (Reprint. *Gift of*  
*Mrs. John Jay White*)
- GUNTHER, Erna. A further analysis of the first salmon  
ceremony. Seattle, University of Washington, 1928.
- HAY, Oliver P. Pleistocene man in Europe and in  
America. [New York,] 1928. (*Gift of the author*)

## INDIAN NOTES

- HISPANIC SOCIETY OF AMERICA. Hispano-Moresque marble basin in the collection of. . . New York, 1928. (*Gift of the Society*)
- Manuscripts in the library of . . . A privilegio rodado King Henry the second of Castilla, Sevilla, 26 May, 1371. Manuscript B8 edited by A. D. Savage. New York, 1928. (*Gift of the Society*)
- HISTORY of the Pequot war, the contemporary accounts of Mason, Underhill, Vincent and Gardener. Reprinted from . . . Mass. Hist. Soc. With additional notes and an introduction by Charles Orr. Cleveland, 1897. (*Gift of Mr. Joseph Keppler*)
- HÔTEL DROUOT. Collection Edmond Haenflein (Deuxième vente). Arts du Pérou précolombien. Poteries: de Nazca, Recuay, Chiclayo, etc. Bois sculptés. Fétiches et ornements en argent et bronze. Collection d'étoffes dont la vente aux enchères publiques aura lieu Hôtel Drouot . . . les Lundi 15 et Mardi 16 Octobre 1928. [Paris, 1928.]
- HRDLIČKA, Aleš. The origin and antiquity of the American Indian. Revised ed. Washington, Smithsonian Inst., 1928.
- The evidence bearing on man's evolution. Washington, Smithsonian Inst., 1928.
- HUBBARD, J. Niles. An account of Sa-go-ye-wat-ha or Red Jacket and his people. . . Albany, 1886. (*Gift of Mr. Joseph Keppler*)
- INSTITUT D'ETHNOLOGIE DE L'UNIVERSITÉ DE PARIS. Instructions pour les voyageurs. Instructions d'enquête linguistique. Paris, 1928.
- Instructions pour les voyageurs. Questionnaire linguistique. 2 vols. Paris, 1928.
- JENNESS, D. Archæological investigations in Bering strait, 1926. *In* Ann. Rep. Nat. Museum Canada, 1926, 71-83, Ottawa, 1928.
- JONES, Howard. The French and English war. Lord Dunmore's expedition to the Pickaway Plains. Circleville, Ohio, Ohio Hist. Day Asso., 1928.
- KRIEGER, Herbert W. Indian villages of southeast Alaska. Washington, Smithsonian Inst., 1928.

## INDIAN NOTES

- LA MERE, Oliver, *and* SHINN, Harold B. Winnebago stories by. Chicago, c 1928. (*Gift of Rand, McNally & Co.*)
- LORD, John K. A history of Dartmouth College, 1815-1909. Concord, N. H., 1913.
- LOUKOTKA, Čestmír. Náboženství Indíánů . . . "Vesmír," Praha, 1926.
- LUNA Y ARELLANO, Tristan. See PRIESTLEY, Herbert I.
- MARISCAL, Federico E. Estudio arquitectónico de las ruinas Mayas, Yucatan y Campeche. México, Sec. Ed. Púb., 1928.
- MASPERO, Henri. The origins of the Chinese civilization. Washington, Smithsonian Inst., 1928.
- MATHIASSEN, Therkel. Eskimo relics from Washington Land and Hall Land. København, 1928. (*Gift of the author*)
- Material culture of the Iglulik Eskimos. Copenhagen, 1928.
- MATTHES, Gerard H. Aerial photography as an aid in geological studies. Amer. Inst. of Mining and Metallurgical Engineers, Inc., New York, 1928. (*Gift of the author*)
- MCINTOSH, John. The origin of the North American Indians . . . New ed. . . . New York, c 1843. (*Gift of Mr. Joseph Keppler*)
- MEDDELELSER OM GRØNLAND, udgivne af Ledelsen af de Geologiske og Geografiske undersøgelser i Grønland. København, 1904-27. 14 vols.
- [MELVILLE, F. B.] Bust portraits of Pueblo Indians. Chicago [1898?]. (*Gift of Dr. Frederick Starr*)
- MÉXICO. SECRETARIA DE EDUCACIÓN PÚBLICA. Estado actual de los principales edificios arqueológicos de México. México, 1928.
- MILLER, John. New York considered and improved, 1695. Published from the original MS. in the British Museum. With introduction and notes by Victor Hugo Paltsits. Cleveland, 1903. (*Gift of Mr. Joseph Keppler*)
- PALACIOS, Enrique Juan. The stone of the sun and the first chapter of the history of Mexico. Translated . . . by Frederick Starr. Chicago, University of Chicago, 1921. (*Gift of the author*)

## INDIAN NOTES

- En los confines de la selva Lacandona. Exploraciones en el estado de Chiapas, Mayo-Agosto, 1926. México, Sec. Ed. Púb., 1928.
- POPENOE, Dorothy H. Las ruinas de Tenampua. Tegucigalpa, 1928. (*Gift of the author*)
- POPENOE, Wilson and Dorothy. Quiriguá, an ancient city of the Mayas. [New York,] 1927. (*Gift of the authors*)
- PRIESTLEY, Herbert Ingram, *tr. and ed.* The Luna papers. Documents relating to the expedition of Don Tristan de Luna y Arellano for the conquest of La Florida in 1559-1561. Deland, Florida State Hist. Soc., 1928.
- PUTNAM, Edward K. Museums passive and active. A paper read before The Contemporary Club, Davenport, Iowa, April 13, 1925. (*Gift of Amer. Asso. of Museums*)
- READ, William A. Research in American place-names, c. 1920-26: a partial review. München [1928]. (Reprint)
- REICHEL, William C., *ed.* Memorials of the Moravian church. Vol. 1 . . . Philadelphia, 1870. (*Gift of Mr. Joseph Keppler*)
- RENAUD, E. B. L'antiquité de l'homme dans l'Amérique du Nord. Paris, 1928. (*Gift of the author*)
- Les origines de la céramique indienne du Sud-Ouest américain. Paris [1928]. (*Gift of the author*)
- RIVET, Paul. Relations commerciales précolombiennes entre l'Océanie et l'Amérique. St. Gabriel-Mödling bei Wien [1928].
- ROSS, Edith Connelley. The old Shawnee mission, the pioneer institution of Christian civilization in the West. . . . Word of introduction by William E. Connelley. Topeka, 1928. (*Gift of Kansas State Historical Society*)
- SCHOOL OF AMERICAN RESEARCH. Official acts and administrative reports, 1918 to 1927. [Santa Fe, 1928?]
- SENECA INDIANS. The case of the Seneca Indians in the State of New York. . . . Printed for the information of the Society of Friends, by direction of the Joint Committees on Indian Affairs, of the four Yearly Meetings of Friends of Genesee, New York, Philadel-

## INDIAN NOTES

- phia, and Baltimore . . . Philadelphia, 1840. (*Gift of Mr. Joseph Keppler*)
- SEVERANCE, Frank H. Old trails on the Niagara frontier. Buffalo, 1899. (*Gift of Mr. Joseph Keppler*)
- SIoux Indian War Village (not a Wild West). Surf Avenue, Coney Island. Program . . . New York [ca. 1892].
- SMET, Pierre Jean de. Letters and sketches, with a narration of a year's residence among the Indian tribes of the Rocky mountains. Philadelphia, 1843. (*Gift of Mr. Joseph Keppler*)
- SMITHSONIAN INSTITUTION. Annual report of the Board of Regents for the year ending June 30, 1927. Washington, 1928.
- . BUREAU OF AMERICAN ETHNOLOGY. 42d Annual Report, 1924-25. Washington, 1928.
- SPECK, Frank G. The Nanticoke and Conoy Indians . . . An historical study. Wilmington, Historical Society of Delaware, 1927.
- SPINDEN, Herbert J. Maya inscriptions dealing with Venus and the moon. *In* Bul. Buff. Soc. Nat. Sci., vol. 14, no. 1, Buffalo, 1928.
- . The population of ancient America. New York, Am. Geog. Soc., 1928. (Reprint)
- . Ancient civilizations of Mexico and Central America. 3d ed. New York, Am. Mus. Nat. Hist., 1928.
- STARR, Frederick. Notes on Mexican archæology. Chicago, University of Chicago, 1894. (*This and the following are gifts of the author*)
- . The little pottery objects of Lake Chapala, Mexico. Chicago, University of Chicago, 1897.
- . A study of a census of the pueblo of Cochiti, New Mexico. [New York,] Putnam Memorial Publ. Fund, 1897.
- . The Mapa de Cuauhtlautzinco or Codice Campos. Chicago, University of Chicago, 1898.
- . Indians of southern Mexico, an ethnographic album. Chicago, 1899.
- . The Cornplanter medal and William P. Letchworth. [Chicago, n.d.]
- . The Cornplanter medal. Chicago, 1905. [Two editions]

## INDIAN NOTES

- The Cornplanter medal for Iroquois research. [Chicago,] 1908.
- The Cornplanter Medal for Iroquois research and Reuben Gold Thwaites. (An address before the Cayuga County Historical Society at Auburn, N. Y., Feb. 31, 1912.)
- Notes upon the ethnography of southern Mexico. Part II. [New York,] Putnam Memorial Publ. Fund, 1902.
- STONE, William L. Border wars of the American revolution. 2 vols. in one. New York, c 1843. (*Gift of Mr. Joseph Keppler*)
- SWANTON, John R. The interpretation of aboriginal mounds by means of Creek Indian customs. Washington, Smithsonian Inst., 1928.
- TEIT, James H. The middle Columbia Salish. Seattle, University of Washington, 1928.
- THATCHER, B. B. Indian traits. . . . 2 vols. New York, 1840. (*Gift of Mr. Joseph Keppler*)
- TUCKERMAN, Lucy D. Suggestions for the library of a small museum of art. Washington, Amer. Asso. Museums, 1928.
- WELLER, Stuart. Paleontology and human relations. Washington, Smithsonian Inst., 1928.
- WELTY, Raymond Leo. Studies in the western army frontier, 1860-1870. (Reprints. *Gift of the University Libraries, State University of Iowa*)
- WEST TEXAS HISTORICAL ASSOCIATION. Yearbook, vol. 4. Abilene, Texas, 1928.
- WOLLEY, Charles. A two years' journal in New York and part of its territories in America. Reprinted from the original edition of 1701. With an introduction and notes by Edward Gaylord Bourne. Cleveland, 1902. (*Gift of Mr. Joseph Keppler*)

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### NOTES

AN ESKIMO WOODEN TRAY.—An excellent wooden tray from Unalaklit, a settlement of the Unaligmiut about 45 miles northeast of St. Michael, Alaska, has been added to the Museum

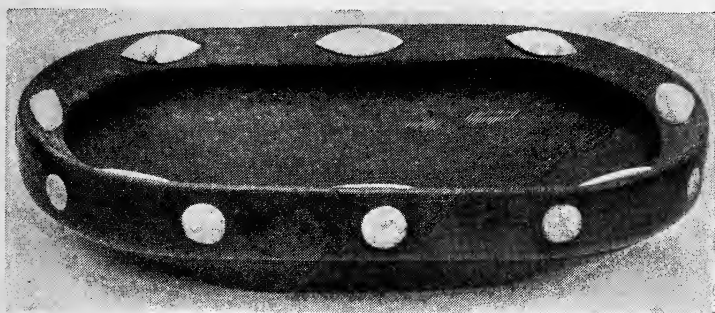


FIG. 22.—Wooden tray of the Unaligmiut Eskimo, from Unalaklit, Alaska. Length,  $15\frac{1}{2}$  in. (16/2229)

collections. In characteristically Eskimo fashion this utilitarian receptacle is ornamented by inlaying with eight almond-shape white stones about the rim and with twelve disks of like material around the outer edge. The body of the tray is carved from a single piece of wood, but the overhanging upper part consists of two pieces, each beveled at both ends in such a way as to overlap at opposite points about two-thirds

## INDIAN NOTES

the distance from one end of the tray, making such well-finished joints that they are not seen in the illustration (fig. 22). The overlapping pieces at each side are fastened together with wooden pegs, and the rim is attached to the body by the tongue-and-groove method, fitting so nicely that the joint is scarcely visible. The receptacle is  $15\frac{1}{2}$  inches long,  $10\frac{1}{4}$  inches wide, and  $3\frac{1}{2}$  inches high.

A somewhat similar and slightly smaller tray is described and illustrated by E. W. Nelson in his *Eskimo About Bering Strait* (*18th Annual Report of the Bureau of American Ethnology*, pt. I, p. 71, pl. XXXII, 8). This specimen, from Nulukhtulogumiut, a settlement of the Kaialigamiut Eskimo of Alaska, is ornamented with eight almond-shape stone pieces as in the Museum example noted, but instead of having inlaid disks around the outer rim, the entire rim is painted red, as is the upper edge on the inside. Below this, on the inside, are two parallel black lines, and painted in black on the bottom is a grotesque figure of a mythological animal.

INDIAN PORTRAITS IN BRONZE.—A trustee of the Museum has generously presented eight excellent bronze portrait plaques of Indians of Washington and Idaho, the work of the late Olin L. Warner, sculptor, in 1889 and 1891.



## INDIAN NOTES

The inscriptions on the plaques, together with the sizes of the latter, are:

Ya-tin-ee-ah-witz, "Poor Crane," chief of the Cayuse. A mighty warrior—friend to the whites—thrice wounded for them. He slew Ehegant hostile chief, 1878—Yakima war 1855—Piute 1867—Bannock and Piute 1878 Snake 1879. (Diam.  $10\frac{7}{8}$  in.)

N-che-askwe. Chief of the Coeur d'Alenes—I. (Diam.  $7\frac{1}{8}$  in.)

Seltice. Chief of the Coeur d'Alenes—II. (Diam.  $7\frac{1}{8}$  in.)

"Lot." Chief of the Spokanes. (Diam. 8 in.)

Sabina. Kash-kash's daughter. A Cayuse æ XIV. (Diam.  $5\frac{3}{4}$  in.)

"Moses." Sulk-tash-kosha. "The Half Sun." Chief of the Okinokans. (Diam.  $8\frac{3}{4}$  in.)

"Young Chief." Cayuse Indian. (Diam.  $7\frac{1}{4}$  in.)

"Joseph." Hin-mah-too'-yah-lat-kekht. Chief of the Nez Percé Indians. (Diam.  $17\frac{1}{2}$  in.)

IN ADDITION to the new publications of the Museum announced in the last issue of *Indian Notes*, Professor Saville's Bibliographic Notes on

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Palenque, and Bibliographic Notes on Xochicalco, are in press to appear respectively as *Indian Notes and Monographs*, vol. VI, nos. 5 and 6.

MR. CLARENCE B. MOORE has presented to the Museum an interesting series of plummet-shape objects from the west coast of Florida, three of them being of coral rock and two of shell. One of the latter is beautifully carved.

AN IMPORTANT addition to the collections in the Museum illustrating the ethnology of the Plains Indians is the greater part of the Richard Joste collection, which was gathered more than forty years ago. Among the most noteworthy items are a series of Sioux shirts, painted skins, and ceremonial pipes.

A GROOVED AX, found at Riverdale avenue and Tulpan terrace, New York City, has been presented to the Museum by Mr. Peter S. Gettell. This is one of the finest stone objects in the Museum collections from within the New York City limits.

A RECENT letter from Dr. H. S. Dickey, who is in charge of the Thea Heye-Dickey expedition to the upper Orinoco river, reports that he has gathered a satisfactory collection of ethnological material and has located several archeological

## INDIAN NOTES

sites. Dr. Dickey hopes to return from the field in February.

AN INTERESTING specimen collected by Lieut. G. T. Emmons and recently received by the Museum is an old blanket loom from the Salish in the vicinity of Duncan, Vancouver island, B. C. The uprights of the loom are elaborately carved in the form of figures, and the tension rod also is intricately carved.

THE MUSEUM is planning, in conjunction with the University Museum of Cambridge, England, to send, early in the present year, an expedition to study the archeological deposits in certain caves in southwestern Texas.

DURING the Director's visit to Europe in October and November he was fortunate enough to procure some very important Mexican archeological objects which will be described in later issues of *Indian Notes*.

DR. WALDEMAR BOGORAS, of the Museum of the Academy of Science at Leningrad, has been studying the collections in the Museum of the American Indian, Heye Foundation, with a view of preparing a memoir on the sledge as depicted in the art of the Eskimo and of adjacent peoples for publication by the latter Museum.

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DR. BRUNO OETTEKING, curator of physical anthropology, who has lectured on this subject in Columbia University since 1921, has received a definite appointment therein as a lecturer. An institution of physical anthropology of the University, in Dr. Oetteking's charge, is in process of organization. Dr. Oetteking will retain his curatorship in the Museum.

THE COLLECTIONS illustrating the intermediate culture of the Central Eskimo have been augmented with sixty-two objects received by exchange from the Danish National Museum at Copenhagen. These specimens were gathered by the Fifth Thule Expedition.

A SMALL but interesting collection of birch-bark articles, as well as some utilitarian objects of wood, collected by Mr. Vincent M. Petrullo from the Algonkin of River Lièvre, River Desert, and Lake Barrière, Quebec, have been acquired by the Museum. The birch-bark articles include a complete series of cut-out patterns.

## POST-CARDS IN COLOR, ILLUSTRATING PHASES OF INDIAN LIFE AND ART

THE MUSEUM now has for sale, at fifty cents per set, two sets of colored post-cards, one set of a dozen illustrating archeological and the other set ethnological subjects. For each set there is a special envelope, appropriately embellished with an Indian design in colors. The cards themselves, which are beautifully printed by the Helio-type process, illustrate the following subjects.

### *Archeological Subjects*

1. Prehistoric pottery vessel from an excavation in San Salvador, Republic of Salvador.
2. Prehistoric cylindrical Mayan jar from Yascaran, Honduras.
3. Decorated double-mouthed bottles of the prehistoric Nasca culture of Peru.
4. Prehistoric effigy vase from Nicoya, Costa Rica.
5. Jars from the prehistoric ruins of Casas Grandes, Chihuahua, Mexico.
6. Prehistoric vessel embellished with painted patterns and with human effigies, from Recuay, Peru.
7. Effigy vessel from Mississippi county, Arkansas.
8. Earthenware incense burner from British Honduras.
9. Sculptured alabaster vase from Honduras.
10. Ancient carved and painted mirror from Peru.
11. Carved stone receptacle from the Valley of Mexico.
12. Jade chisels from Alaska.



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*Ethnological Subjects*

13. Human bodies shrunk after the removal of all the bones by the Jivaro Indians of Tierra Oriente, Ecuador.
14. Head-dress, wands, and whistles used in ceremony by the Hupa Indians of California.
15. Deerskin coat, decorated in painted and rubbed designs. Naskapi Indians of northeastern Canada.
16. Sioux shirt made of deerskin, decorated with porcupine-quills, scalp-locks, and painted lines.
17. Ceremonial mask of carved and painted wood. Auk division of the Tlingit of southern Alaska.
18. Head-dress and wands used in a Corn dance by the Zuñi Indians of New Mexico.
19. Shirt woven of mountain-goat wool, used in ceremony by the Chilkat Indians of Alaska.
20. Feather head-dress worn by the Caraja Indians of Rio Araguaya, States of Matto Grosso and Goyaz, Brazil.
21. A typical tipi of the Indians of the northern plains.
22. Jivaro Indian in dance regalia. Ecuador.
23. Pueblo water-jars from Acoma and Zuñi, New Mexico.
24. A small plaza of Zuñi pueblo, New Mexico, during the performance of a Rain dance.

MUSEUM OF THE AMERICAN INDIAN,

HEYE FOUNDATION,

*Broadway at 155th Street,*

New York, N. Y.